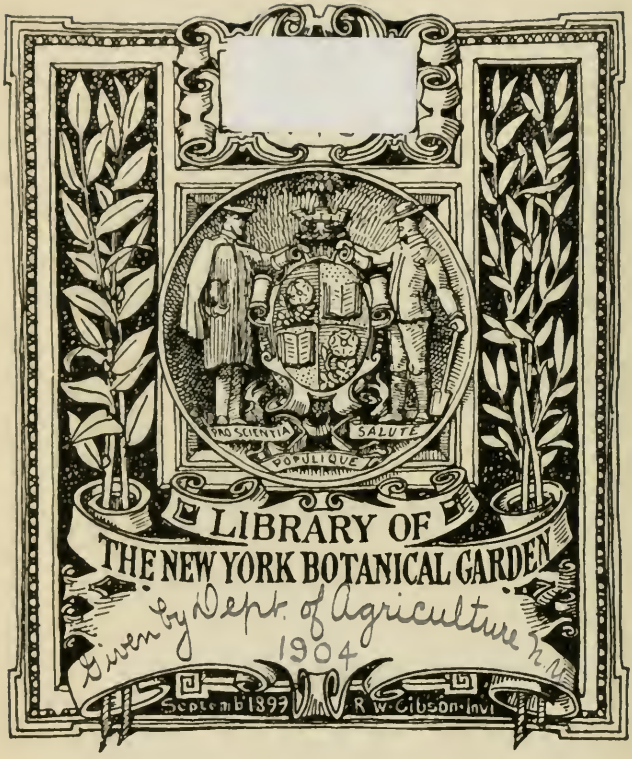
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STATE OF NEW YORK.

DEPARTMENT OF AGRICULTURE.

SEVENTH ANNUAL REPORT

The Report of the Commissioner of Agriculture, for 1899, consists of three volumes, as follows:

Volume I. Seventh Annual Report of the regular work of the Department of Agriculture, as required by section 5 of chapter 338 of the Laws of 1893.

Volume II. Twelfth Annual Report of the Cornell University Agricultural Experiment Station, made to the Commissioner of Agriculture in compliance with the provisions of section 87 of chapter 338 of the Laws of 1893.

Volume III. Eighteenth Annual Report of the New York Agricultural Experiment Station, made to the Commissioner of Agriculture in accordance with the provisions of section 85 of chapter 338 of the Laws of 1893.

ALBANY:
JAMES B. LYON, STATE PRINTER,
1900.

STATE OF NEW YORK.

DEPARTMENT OF AGRICULTURE.

SEVENTH ANNUAL REPORT

OF THE

LIBRARY
NEW YORK
BOTANICAL
GARDEN

COMMISSIONER OF AGRICULTURE.

FOR THE YEAR 1899.

TRANSMITTED TO THE LEGISLATURE JANUARY 17, 1900.

ALBANY:
JAMES B. LYON, STATE PRINTER,
1900.

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STATE OF NEW YORK.

No. 80.

IN ASSEMBLY,

JANUARY 17, 1900.

SEVENTH ANNUAL REPORT

OF THE

Commissioner of Agriculture.

To the Honorable the Legislature of the State of New York:

In accordance with the provisions of the statutes relating thereto, I have the honor to herewith transmit the Seventh Annual Report of the work of the Department of Agriculture of the State of New York for the year ending September 30, 1899.

CHARLES A. WIETING,
Commissioner of Agriculture.

Department of Agriculture.

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Commissioner.

CHARLES A. WIETING, Cobleskill, N. Y.

Assistant Commissioners.

First Division..... GEORGE L. FLANDERS,
Albany, N. Y.

Second Division..... FREDERICK J. H. KRACKE,
No. 23 Park Row, New York, N. Y.

Third Division..... EBENEZER J. PRESTON,
Amenia, N. Y.

Fourth Division..... T. JAMES OWENS,
Remsen, N. Y.

Fifth Division..... S. BROWN RICHARDSON,
Lowville, N. Y.

Sixth Division..... CHARLES T. RUSSELL,
Munnsville, N. Y.

Seventh Division..... VERLETT C. BEEBE,
Arcade, N. Y.

Eighth Division..... WILLIAM T. HUGHES,
Room 221, Powers' Block, Rochester, N. Y.

Ninth Division..... *ASA L. TWITCHELL,
Springville, N. Y.

Tenth Division..... JAMES P. CLARK,
Falconer, N. Y.

* Removed. John H. Grant, Buffalo, N. Y., appointed October 15, 1900. Office, No. 891–893 Ellicott Square, Buffalo, N. Y.

APR 25 1904

REPORT.

In submitting this, the Seventh Annual Report of the Department of Agriculture, I call your attention to the fact that the working divisions have not been changed since making my former report. They are as follows:

First Division.— Comprising the following counties: Albany, Otsego, Rensselaer, Saratoga, Schenectady, Schoharie and Washington.

Second Division.— Comprising the following counties: Kings, Nassau, New York, Queens, Richmond, Suffolk and one-half of Westchester.

Third Division.— Comprising the following counties: Columbia, Delaware, Dutchess, Greene, Orange, Putnam, Rockland, Sullivan, Ulster and one-half of Westchester.

Fourth Division.— Comprising the following counties: Essex, Fulton, Hamilton, Herkimer, Montgomery, Oswego, Oneida and Warren.

Fifth Division.— Comprising the following counties: Clinton, Franklin, Jefferson, Lewis and St. Lawrence.

Sixth Division.— Comprising the following counties: Broome, Chenango, Cortland, Madison, Onondaga, Tioga and Tompkins.

Seventh Division.— Comprising the following counties: Chemung, Genesee, Livingston, Schuyler, Steuben and Wyoming.

Eighth Division.— Comprising the following counties: Cayuga, Monroe, Ontario, Seneca, Wayne and Yates.

Ninth Division.— Comprising the following counties: Erie, Niagara and Orleans.

Tenth Division.— Comprising the following counties: Allegany, Cattaraugus and Chautauqua.

The Assistant Commissioners in charge of the divisions during the fiscal year just ended are the same as those reported in my last annual report, with the exception that in the Third Division, in the place of Hon. Henry E. Ambler, of Chatham, N. Y., who resigned on account of having been elected a member of the State Senate, I appointed from the civil service eligible list Mr. Ebenezer J. Preston, of Amenia, N. Y.

The divisions are ten and the Assistant Commissioners in charge of them are as follows:

First Division..... George L. Flanders.
Second Division..... Frederick J. H. Kracke.
Third Division..... Ebenezer J. Preston.
Fourth Division..... T. James Owens.
Fifth Division..... S. Brown Richardson.
Sixth Division..... Charles T. Russell.
Seventh Division..... Verlett C. Beebe.
Eighth Division..... William T. Hughes.
Ninth Division..... Asa L. Twitchell.
Tenth Division..... James P. Clark.

There have been but few changes in the employes of this Department during the last fiscal year, all new appointees having been chosen from the civil service eligible list, in accordance with the rules of the Civil Service Commission and the law under which it operates.

The general work of this Department consists in enforcing the provisions of the law relating to

(1) To provide butter and cheese experts to give instruction in the art of making uniform, first-class butter and cheese.

(2) Providing against the sale or delivery to factories or creameries of impure, unhealthy or unwholesome milk.

(3) To provide against keeping of cows, for the production of milk for sale or exchange, in a crowded or unhealthful condition, and against feeding such cows on distillery waste or on any substance that will produce unwholesome or unhealthful milk.

(4) Regulating the sale of condensed milk.

(5) Providing against the manufacture and sale of imitation butter, and its use in boarding-houses and places of public intertainment.

(6) Providing against the manufacture and sale of imitation cheese.

(7) Providing for branding full cream cheese as "New York State Full Cream Cheese," and against falsely branding butter or cheese.

(8) Providing against the manufacture and sale of adulterated or imitation vinegar.

(9) Providing for the suppression of infectious and contagious diseases among domestic animals, except tuberculosis and glanders.

(10) Providing for the prevention of diseases among bees.

(11) Providing for the prevention and suppression of contagious and infectious diseases and pernicious insects in fruit trees, plants, etc.

(12) Providing against the manufacture and sale of Paris green, except as provided in the statute.

(13) Providing for the encouragement of the sugar beet culture and the manufacture of beet sugar in the State.

(14) Providing against the manufacture and sale of adulterated linseed or flaxseed oil.

(15) Providing against the selling of "Bob Veal," i. e., meat from calves under four weeks of age, or from calves that were diseased at the time of killing.

(16) Providing for the distribution of moneys to the agricultural societies of the State for the promotion of agriculture.

(17) Relative to Farmers' Institutes.

(18) Providing against selling adulterated or imitation maple syrup or maple sugar.

(19) To exercise such supervision as is provided relative to the New York State Agricultural Experiment Station, and the Agricultural Experiment Station at Cornell University, and the State Weather Bureau.

(20) Relating to process butter and use of preservalines in dairy products.

(21) Relating to sale and analysis of concentrated feeding stuffs.

In doing all the work with which this Department is charged I have continued the system which I followed last year, viz.: Putting the enforcement of the laws in each particular division under the control of the Assistant Commissioner in charge of that division and holding him responsible for that work.

For an account of the work of each in their respective divisions you will see the reports of the Assistant Commissioners attached hereto.

MILK.

The enforcement of the milk law requires more expense and work than it did before the amendment providing that we should take samples from the dairy, but, in my judgment, it has helped to strengthen the law by giving increased confidence. No cases are now brought except where the milk of the dairy proves to be better in quality than the milk sold by the party from whom taken. In many instances suits have been avoided from the very fact that the great difference between the milk produced by the dairy and that sold by the defendant was such conclusive proof of adulteration that penalty was paid without further question. All in all, the amendment, in my judgment, was wise. I believe it is fair to state that the average milk to-day sold upon the market to the consumer is practically pure. Now and then there is a person who, either through ignorance of the law or through sheer defiance of it, adulterates and sells such milk upon the market. The adulteration, what little there is, is not confined to adding water. There is some adulteration by the use of preservaline and some by the use of coloring matter. This, however, I believe, is at the minimum, as our agents are prepared to and do test milk for these two adulterants. We have made some few cases against persons for thus adulterating, but the number is not large. I am a little at a loss to know why people will adulterate rich milk by coloring it, as is

sometimes the case. For instance: One man was detected selling milk that had been colored; the analysis of the milk showed it to contain over five per cent. of fat, as rich milk as could be asked for, and yet adulterated by coloring, which, as a matter of fact, deteriorated the value of the milk. We can account for it on no ground except that vendors of this coloring matter persuade milkmen into believing it will add apparently to its richness, so as to induce customers to purchase of them. This is all based upon two propositions. One is the proposition for gain, and that gain depends upon the success of the vendor in deceiving the consuming public. This is wrong in principle and some means should be found to stop it. We can stop the sale of such milk when we find it, but we cannot stop these vendors of coloring matter from tempting or inducing the milkmen to use their goods. I am of the opinion that an enactment placing a heavy penalty upon a person who thus induces or attempts to induce any vendor of food products to violate a State law would be wise and just.

One of the questions that confronts our agents in determining whether to take samples of skimmed milk for analysis (which is expensive), is whether the vendor is selling the commodity on his wagon for skimmed milk or selling it as whole milk, when he has upon the same wagon both whole and skimmed milk. A milkman under the present statute has a right to sell anywhere in the State of New York, except in the counties of New York and Kings, skimmed milk, provided he sells it as and for such. The peculiar feature of the law is this: If a milkman is selling milk from his wagon upon which are both kinds, our agents must either take the vendor's word that he is selling the skimmed milk as and for skimmed milk, or they must take a sample and have it analyzed; when the analysis is returned we must bring an action and put the party upon his defense to show that he was thus selling it, as it is a fact peculiarly within his own knowledge, or we must send our agents to watch the particular vendor and see where he sells milk; then send into private homes to inquire what kind of milk

they were buying. I am of the opinion that this kind of evidence is not exactly the kind that we should rest our cases upon, and, therefore, feel constrained to again recommend to your honorable body that you pass a law to the effect that no person selling skimmed milk shall be allowed to sell it from the same wagon from which he is at the same time selling pure and whole milk, and that the wagon from which he sells skimmed milk should bear a sign upon which should be the words "Skimmed Milk" of sufficient size and color to be easily seen by the purchaser at a reasonable distance. Such an enactment would do away with this difficulty without being a hardship; at least, not enough of a hardship to take into consideration compared with the good that would result to the consuming public. The number of milk cases made during the past year is included in the list of cases herewith submitted that have been referred to the Attorney-General during the fiscal year.

The reports of the Assistant Commissioners of the different divisions, outside of Albany, show that the consumption of milk is upon the increase; about six per cent. more milk having been drawn from the country districts to supply the cities' wants than last year.

Taking New York city as an illustration of the increasing amount of milk consumed each year, we find that in that city was consumed during the years 1888 to 1899, inclusive, milk as follows:

	40-quart cans.
1888	6,062,216
1889	6,630,278
1890	8,141,983
1891	8,269,953
1892	9,084,781
1893	9,303,315
1894	9,485,018
1895	9,336,827
1896	10,079,417
1897	10,338,356
1898	12,382,106
1899	13,121,655

CREAM.

In the Agricultural Law there is no provision against adulterating cream, except the provision against using preservatives in dairy products. In my judgment some action should be taken by the Legislature relative to this commodity to the end that cream when sold upon the market shall be pure.

CHEESE.

During the year we have had four cheese instructors busy a large share of the time in giving instruction where needed as to the best method of making a uniform, first-grade cheese. I am constrained to state now, as a matter of fact, what in my last annual report I stated as a fear only, viz.: That the efforts we are putting forth along this line are being vitiated by dealers in outside States who are ruining the reputation of New York State full-cream cheese by using *fac-similes* of the brand issued by this Department upon cheese of an inferior quality made elsewhere than in the State of New York. I am satisfied that something must be done by the National Government to stop this. A law should, in my judgment, be enacted by the government to the effect that no dairy or food products should be falsely branded as to the State in which they are made, or a law providing that each State may register a State trade-mark, and that it shall not be used upon any goods made elsewhere than in the State so registering it. One of these laws should be enacted and rigidly enforced in the interest of integrity and honest production. If it is not done all the work that has been done in the State of New York and all the money expended along the line of producing a uniform, first-grade of cheese has been virtually thrown away, because the counterfeit brand, above referred to, is leaving an impression among the buyers outside of this State that our full-cream cheese is an inferior article. There are in this State 1,023

cheese factories, which in the year 1898 manufactured 84,332,155 pounds of cheese, most all of which was a uniform, first-grade article. Surely the manufacturers of such a commodity should not be robbed of the credit due them for making such commodity, particularly by unscrupulous persons whose only object is to gain financially at the expense of the consumer.

CHEESE BRANDS.

Cheese brands have been issued to the following factories during the year:

LIST OF STATE CHEESE BRANDS ISSUED DURING THE YEAR ENDING DECEMBER 31, 1899, BY COUNTIES.

ALLEGANY COUNTY.

NAME OF FACTORY.	Applicant.	Post-office.
Allegany B. & C. Mfg. Co.	Chas. Conlon	Angelica.
Allentown	Riley Allen	Allentown.
Almond	H. D. Palmer	Almond.
Andover	W. F. Snyder	Andover.
Angelica Union	C. F. Potter	Angelica.
Babbitt's	Mrs. J. A. Hogg	Hume.
Baker, Abel	Mrs. Addie L. Baker	Phillips Creek.
Beach Hill	R. C. Alsworth	Shongo.
Belfast	A. E. Perry	Sterlingville.
Bishopville	Geo. McCarthy	Bishopville.
Black Creek	M. J. Dunn	Black Creek.
Brownside	M. E. Gordon	Rushford.
Brown	T. G. Brown	Andover.
Caneadea	Young & Young	Fillmore.
Cansaraga	Young & Young	Fillmore.
Clarksville Centre	M. M. Congdon	West Clarksville.
Crowner	Wm. H. Wahl	Elm Valley.
Cryder Creek	F. B. Boyce	Wellsville.
Cuba Village	A. A. Arnold	Cuba.
East Grove	Wm. Kuder	Whitney Crossings.
East Hill	Hobart & Sizer	Friendship.

LIST OF STATE CHEESE BRANDS ISSUED DURING THE YEAR, ETC.— ALLEGANY COUNTY — (*Continued.*)

NAME OF FACTORY.	Applicant.	Post-office.
Elm Valley	U. W. Stratton	Elm Valley.
Empire	H. E. Osgood	Belmont.
Fenner's Home	E. P. Fenner	Alfred Station.
Fillmore	Young & Young	Hume.
Five Corners	Sam Cornelius	Alfred.
Ford Brook	T. J. Carmody Co.	Cuba.
Forest	M. M. Congdon	West Clarksville.
Friendship	M. W. Hobart	Friendship.
Genesee Valley	J. E. Costello	Friendship.
Gilt Edge	J. C. Holden	Cuba.
Hall's	A. E. Hall	Ward.
Hallsport	T. J. Carmody Co.	Cuba.
Hardy's	C. E. Pettit	Rushford.
Hartrum's	J. M. Hartrum	Andover.
Houghton	P. B. Loftis	Houghton.
Hume	Young & Young	Fillmore.
Inavale	Len Newton	Inavale.
Independence	Alfred W. Stone	Independence.
Karrdale	Walter McHenry	Almond.
Keller Hill	A. J. Reynolds	Cuba.
Kelloggsville	F. W. Hogg	New Hudson.
Keystone	J. R. Lamont	Aristotle.
Knight's Creek	J. L. Coyle	Scio.
Lafferty	Jas. Loftis	Cuba.

Little Genesee	Raymond & Wirt	Little Genesee.
Maple Grove	Frank Closser	Allen.
Marshall	A. E. Perry	Belfast.
McHenry Valley	H. E. Fenner	Almond.
Mills Mills	A. L. Boller	Hume.
Moscoy	Young & Young	Fillmore.
Mt. Monroe	C. E. Pettit	Rushford.
New Hudson Centre	E. L. Van Skoik	Black Creek.
North Branch	F. W. Harbeck	Friendship.
Oromel	F. W. Hogg	New Hudson.
Pearl Creek	Adelbert Witter	Petrolia.
Phillips Creek	Ockerman & Co.	Phillips Creek.
Piatt	F. J. Lewis	Short Tract.
Pleasant Valley	O. S. Fenner	Alfred Station.
Podonque	M. E. Gordon	Rushford.
Rawson	Alexander Dunn	Rawson.
Rice	John McCarthy	Friendship.
Richburgh	F. J. Brown	Richburg.
Rockville	A. E. Perry	Belfast.
Rush Creek	Young & Young	Fillmore.
Scio No. 1	Mrs. H. A. Babcock	Scio.
Shongo	R. C. Alsworth	Shongo.
Shongo	Young & Young	Fillmore.
Short Tract	Young & Young	Fillmore.
Slater Creek	Chas. Swain	Canaseraga.
South Andover	A. M. Mingus	Andover.
South Bolivar	B. F. Hayward	South Bolivar.
South Cuba	G. S. Marsh	Cuba.
Spring Brook	M. J. Dunn	Black Creek.

LIST OF STATE CHEESE BRANDS ISSUED DURING THE YEAR, ETC. — ALLEGANY COUNTY —(*Concluded*).

NAME OF FACTORY.	Applicant.	Post-office.
Spring Mills	C. L. Richardson	Spring Mills.
Star	Mrs. J. A. Hogg	Centreville.
Stone Spring	Young & Young	Fillmore.
The Allen	Jas. A. Hogue	Belfast.
Tip Top Summit	A. C. Baker	Alfred.
Transit Bridge	A. E. Perry	Belfast.
Trapping Brook	Mary J. Mead	Wellsville.
Union	Young & Young	Fillmore.
Vandemark No. 1	G. E. Dodge	Scio.
Vandemark No. 2	G. E. Dodge	Scio.
West Almond	A. A. Raymond	West Almond.
West Branch	James & Kendall	Rushford.
West Burns	W. B. Child	Whitney Crossings.
West Hill	Jas. McMurtry	Caneadea.
West Nile	Henry Wyant	Nile.
White Creek	W. E. Wilkinson	Belfast.
Wildman	C. H. Austin	Whitesville.
Wirt Centre	Frank Cooley	Wirt Centre.
Withey	W. J. Guill	Withey.
Yorkshire Centre No. 6	E. L. Jones	Delevan.
Yorkshire Centre No. 15	E. L. Jones	Delevan.

Broome County.

Conklin Milk Product Co	John Kane	Conklin.
Delaware Valley	S. S. Brown	New York city.
Echo Lake	Sanford A. Wilbur	Upper Lisle.
Hurd	Frank Delong	Harpersville.
Locust Brow	J. W. Merchant	Binghamton.
North Fenton	C. H. Paddleford	Fenton.
West Windsor	Dewitt Hall	West Windsor.

Cattaraugus County.

Abbott No. 2	O. J. Folts	Ischua.
Abbott Union	Thos. L. McVey	Abbott.
Ashford	J. R. Zetwick	Ashford.
Axville	O. S. Wright	Conewango.
Barber	W. H. Klens	Otto.
Beaver Meadows	J. W. Clair Co.	Springville.
Bedford Corners	A. E. Perry	Belfast.
Bellows	A. B. Neff	Ashford.
Bigelow	J. W. Clair	Springville.
Block	J. W. Clair	Springville.
Broadway	S. D. Vance	East Concord.
Bullock	Geo. E. Hogg	Arcade.
California Hill	J. W. Clair Co.	Little Valley.
Canada Hill	A. B. Neff	Ashford.
Conewango Creamery	O. S. Wright	Conewango.
Demmons	J. W. Clair	Springville.
Double Mill Hill	J. W. Clair Co.	Little Valley.
Dutch Hill	M. V. Costello	Hinsdale.
Eagle	Ahrens & Zetwick	East Otto.

NAME OF FACTORY.	Applicant.	Post-office.
East Otto	Ahrens & Zetwick	East Otto.
East Valley	G. C. Wulff	Orlando.
Elgin	S. M. Fisher	Elgin.
Elkdale	J. W. Clair Co.	Little Valley.
Elko	D. E. Underwood	Tunesassa.
Ellicottville	E. C. Alsworth	Ellicottville.
Elm Creek	D. A. Cowan	East Randolph.
Fairview	D. L. Hooper	Fairview.
Fay Hollow	Ivan J. Osman	Hinsdale.
Farmersville	C. E. Wright	Laidlaw.
Farmersville No. 1	C. E. Wright	Laidlaw.
Fish Hill	Anson Fuss	Little Valley.
Five Mile Union	E. D. Bennett	Allegany.
Five Mile Union	Michael Zister	Allegany.
Five Points	J. W. Clair Co.	Little Valley.
Four Mile	H. F. Marting	Allegany.
Fox	J. W. Clair Co.	Springville.
Franklinville, Nos. 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14	E. H. Farrington	Franklinville.
Franktown	A. B. Neff	Ashford.
Freedom	S. J. Owens	Sandusky.
Gampp	J. Gampp	Randolph.
Glen Brook, Nos. 1 and 2	John Jenkel	Ellicottville.
Hamilton Hill	P. J. Pettit	Haskell Flats.

Haskell No. 2	Frank E. Willover	Haskell Flats.
Haskell Flats	P. J. Pettit	Haskell Flats.
Highland	W. A. Hopkins	Conewango.
Hill Top Farm	E. T. Ryder	Gowanda.
Hinsdale	W. L. Hogg	Hinsdale.
Home	Jas. N. Brown	Cuba.
Irish Hill	G. C. Wulff	Orlando.
Ischua	E. S. Moses	Ischua.
Jenkel	J. W. Clair Co.	Springville.
Lamb	J. W. Clair Co.	Springville.
Lebanon	H. C. Peaslee	East Randolph.
Leon Centre	John McAdam	Leon.
Leon Union	H. A. Damon	Leon Centre.
Lime Brook, Nos. 1 and 4	P. F. Jark	Otto.
Little Valley	J. W. Clair Co.	Little Valley.
Lyndon	Thos. Case	Lyndon.
Maple Grove	Geo. W. Haskell	Sandusky.
Maynard	Ahrens & Zetwick	East Otto.
Napier	J. S. Cornwell	Leek.
North Napier	J. W. Clair Co.	Little Valley.
North Valley	Anson Fuss	Little Valley.
Otto Crescent	E. Ross & Co.	Gowanda.
Peoples	W. T. Peaslee & Son	East Randolph.
Perrysburg	L. H. Wood	Perrysburgh.
Plato	John H. Wulff	Plato.
Pleasant Valley	L. F. Ingalls	Cuba.
Pullman	J. W. Clair Co.	Little Valley.
Randall	J. W. Clair Co.	Little Valley.
Randolph	Zenas Carpenter	East Randolph.

LIST OF STATE CHEESE BRANDS ISSUED DURING THE YEAR, ETC. — CATTARAUGUS COUNTY —(*Concluded*).

NAME OF FACTORY.	Applicant.	Post-office.
Randolph, Nos. 3, 4 and 5	Zenas Carpenter	East Randolph.
Red House	Mrs. Hattie J. Marsh	Red House.
Riceville	A. B. Neff	Ashford.
Rock Spring Union	Chas. Smith, Jr.	Springville.
Ross, Nos. 1 and 2	E. Ross & Co.	Gowanda.
Sandusky, Nos. 1 and 2	J. B. Lewis	Sandusky.
Sandusky No. 2	Zenas Carpenter	East Randolph.
Sandusky, Nos. 3, 4, 5, 6, 9 and 12	J. B. Lewis	Sandusky.
Schwertze	A. B. Neff	Ashford.
Scott	J. Gampp	East Otto.
South Dayton	J. Dorsey	South Dayton.
South Dayton No. 2	J. Dorsey	South Dayton.
South Dayton No. 3	J. Dorsey	South Dayton.
South Napoli	J. W. Clair Co.	Little Valley.
Spring Brook No. 1	C. J. Buskist	New Albion.
Spring Brook No. 2	C. J. Buskist	New Albion.
Spring Brook No. 3	C. A. Facklam	Otto.
Spring Brook No. 4	Henry J. Gould	Cattaraugus.
Spring Brook No. 6	C. J. Buskist	New Albion.
Spring Brook No. 7	C. J. Buskist	Maples.
Spring Brook No. 8	C. J. Buskist	Maples.
Spring Valley	W. T. Peaslee & Son	East Randolph.
Star	E. H. Farrington	Franklinville.
Stone	W. J. Bush	Franklinville.

Story	Luther E. Story	Steamburg.
Union	Ahrens & Zetwick	East Otto.
Van Brunt	A. Van Brunt	Carroll.
Vedder Corners	John H. Wulff	Plato.
Vinton	E. C. Alsworth	Ellicottville.
Wesley	A. Howard	Wesley.
West Farmersville	S. A. Peavy	Great Valley.
West Machias	J. W. Clair Co.	Springville.
West Valley	J. W. Clair Co.	Springville.
Wilbers Allegany No. 15	H. M. Wilber	Allegany.
Yorkshire Centre, Nos. 1, 2, 3, 4, 8, 7 and 14,	E. L .Jones	Delevan.

CAYUGA COUNTY.

Cato	Will Whitney	Jordan.
Como	Arthur Glover	Como.
Moravia	E. J. Arnold	Moravia.
Slone	H. E. Slone	Kelloggsville.
Sterling	R. H. Stevenson	Sterling.

CHAUTAUQUA COUNTY.

Abbey	H. E. Gampp	Randolph.
Alden	A. D. Alden	Sinclairville.
Arkwright Centre	F. W. Horton	Arkwright.
Arkwright Union	W. C. Bartlett	Laona.
Bemus Point	Frank J. Wheeler	Bemus Point.
Blockville	G. H. Burlage	Blockville.
Caneadea	F. E. White	Griswold.
Centralia	W. O. Waterman	Dewittville.

LIST OF STATE CHEESE BRANDS ISSUED DURING THE YEAR, ETC.— CHAUTAUQUA COUNTY —(*Concluded*).

NAME OF FACTORY.	Applicant.	Post-office.
Charlotte Centre	M. R. Tarbox	Charlotte Centre.
Charlotte Union	E. F. Lake	Charlotte Centre.
Dean	Ingerson & Marsh	Dean.
Dennison	F. L. Clark	Charlotte Centre.
Ellery	Cowder Bros.	Ellery.
Ellington Comb. No. 1	E. F. Rowley	Kennedy.
Ellington Comb. No. 2	E. F. Rowley	Kennedy.
Ellington Comb. No. 3	E. F. Rowley	Kennedy.
Ellington Comb. No. 4	E. F. Rowley	Kennedy.
Ellington Comb. No. 5	E. F. Rowley	Kennedy.
Ellington Comb. No. 6	E. F. Rowley	Kennedy.
Ellington Comb. No. 8	E. F. Rowley	Kennedy.
Forestville	L. Stanley	Forestville.
Glendall	Fred H. Ames	Hartfield.
Goshen	J. J. Colwell	Bear Lake, Pa.
Grant	F. Wesley Engle	Watts Flats.
Hamlet	Delos Tanner	Hamlet.
Laona	S. G. Bartlett	Laona.
Lewis	S. W. Lewis	Stockton.
Linwood	D. H. Thompson	Randolph.
Mayville	E. F. Rowley	Kennedy.
Moons	I. N. Gampp	Moons.
Nashville	C. Montgomery	Nashville.
Red Bird	A. D. Alden	Sinclairville.

Rood Tract	A. J. Rood	Sinclairville.
Scotch	Robt. McCubbin	Stockton.
Sinclairville	J. L. Ells	Sinclairville.
South Dayton No. 4	J. Dorsey	South Dayton.
Villenova	H. S. Sweetland	Villenova.
Waterman, N.	N. Waterman	Dewittville.
Watts Flats	F. Wesley Engle	Watts Flats.
West Ellery	Frank W. Stowell	Bemus Point.

CHENANGO COUNTY.

Borden	H. J. Borden	Plymouth.
Centre	A. S. Hay	Otselic Centre.
Church	Church Bros.	Afton.
Columbus	Empire Cheese Co	New Berlin.
Cottage	Wm. Casey	Sherburne.
Cowles	Geo. D. Cowles	Greene.
Deer Lake	Will C. Moulton	Norwich.
Deer Spring	G. C. Stiles	Tyner.
Empire	B. E. Holcomb	Oxford.
Empire State Creamery	E. G. Franklin	South Otselic.
Empire State Dairy Co	Empire State Dairy Co	Brooklyn.
Harbor	H. C. Brockway	Richfield.
Harrisville	A. H. Dart	Sherburne.
Hillside	A. T. Gahan	Sherburne.
Jordan, I. C.	Empire State Dairy Co	Brooklyn.
Kirk	H. J. Borden	Plymouth.
Lincklaen Centre	A. Harris	Lincklaen Centre.
McDonough	C. H. Southard	Smithville Flats.
Marcy	L. A. Gross	Greene.

Name of factory.	Applicant.	Post-office.
Mariposa	Curtis Kenyon	South Otselic
Mill Brook	C. H. Southard	Smithville Flats.
Norwich	Jay McDaniels	Norwich.
North Guilford	M. Z. Tuthill	Guilford.
North Pitcher	Ira Goodsell	North Pitcher.
Otselic	Frank E. Brown	Otselic.
Page Brook	P. E. White	Greene.
Preston	C. H. Southard	Smithville Flats.
Reynolds	W. S. Reynolds	Smyrna.
Silver Spring	G. G. Robinson	Sherburne.
Smithville Centre	J. F. Lee	Norwich.
Smithville Excelsior	C. H. Southard	Smithville Flats.
Smyrna Hill	Geo. W. Church	Smyrna.
South Plymouth	E. E. Smith	South Plymouth.
Todd	Fred H. Wilcox	Sherburne.
Wood's Corners	O. A. Weatherly	Norwich.
Clinton County.		
Peru	A. D. Boomhower	Plattsburgh.
Smithdale	A. D. Boomhower	Plattsburgh.
Cortland County.		
Balknap Butter and Cheese Co.	Geo. Salisbury	Willett.
Blodgett's Mills	Jos. Lammle	New York city.

Cortland County Central	Geo. S. Davis	McGraw.
Crystal Spring	Maybury & Kenfield	McGraw.
Curtis	Albert Curtis	Chenango.
Cuyler Milk Depot	Henry Austin	New York city.
Holenbeck	Seymour Holenbeck	Texas Valley.
Homer West Union	J. S. McMaster	Homer.
House	J. C. House	Marathon.
Kesler	Chauncey Kesler	Marathon.
Maple Grove	Geo. E. Dodd	Truxton.
Meacham	J. W. Hallock	Marathon.
Miller	H. C. Dutton	Truxton.
North Solon	C. W. Ellis	McGrawville.
Otselic Valley	C. A. Rooks	Upper Lisle.
Preble	John Bosch & Son	Preble.
Rand & Thorn Milk Station	L. H. Matthews	East Fulton.
Scott	H. E. J. Potter	Scott.
Sears	Frank E. Perry	Cortland.
Tarbox	Adelbert Tarbox	Marathon.
Taylor	Isaiah Baldwin	Taylor.
Wightmans	Homer Wightman	Marathon.
Willett	W. E. Beardslee	Willett.

DELAWARE COUNTY.

Delhi	P. E. Sanford	New York city.

ERIE COUNTY.

Boies No. 1	H. L. Boies	West Hill.
Chaffee	Franklinville Cheese Co	Chaffee.
Clear Creek	F. A. Bingham	Collins Centre.

NAME OF FACTORY.	Applicant.	Post-office.
Clear Creek No. 1	J. C. Brigham	Collins Centre.
Clear Creek No. 2	J. C. Brigham	Collins Centre.
Clear Creek No. 4	Curtis Hyde	Langford.
Cloverdale	J. S. Simons	Sardinia.
Colden Centre	Richardson, Beebe & Co	East Aurora.
Collins Centre	S. D. Vance	East Concord.
Dye	J. W. Clair	Springville.
East Branch	S. D. Vance	East Concord.
Erie No. 1	Geo. Karr	Collins.
Glenwood	S. D. Vance	East Concord.
Gowanda	S. D. Vance	East Concord.
Henshaw	J. W. Clair	Springville.
Langford	S. D. Vance	East Concord.
Lawton's	S. D. Vance	East Concord.
Matteson's	Franklinville Cheese Co	Chaffee.
Newton	Franklinville Cheese Co	Chaffee.
North Colden	Richardson, Beebe & Co	East Aurora.
Protection	Richardson, Beebe & Co	East Aurora.
Prairie Queen	I. A. M. Skuse	Collins Centre.
Richmond	J. W. Clair	Springville.
Rider	J. W. Clair	Springville.
Scrabble Hill	S. D. Vance	East Concord.
South Branch	S. D. Vance	East Concord.
South Colden	Richardson, Beebe & Co	East Aurora.

Springville	J. W. Clair	Springville.
Tabor	S. D. Vance	East Concord.
Tefft	J. W. Clair	Springville.
Townsend Hill	J. W. Clair	Springville.
West Concord	S. D. Vance	East Concord.
Woodside No. 1	T. E. Moore	Mortons Corners.
Wyandale	S. D. Vance	East Concord.

FULTON COUNTY.

Bennett	J. O. Bennett	Emmonsburg.
Ephratah	Berton Walts	Ephratah.
Willow Creek	Albert N. Getman	Ephratah.

GENESEE COUNTY.

Alexander Mfg. Co	M. E. Moulton & Co	Alexander.
Byron	H. C. Norton	Byron.

HERKIMER COUNTY.

Banner	C. G. Babcock	Newport.
Bartlett, Rush	Rush Bartlett	Winfield.
Bartow Hill	J. W. Ford	Fairfield.
Burlinger & Heath	Jas. A. Irwin	Edicks.
Burt Grove	Deloss M. Burt	Little Falls.
Bush	Loadwick Springer	Little Falls.
Casler	Philo W. Casler	Van Hornesville.
Cedar Lake	J. L. Carver	Cedar Lake.
Cedarville	Grant Hollenbeck	Cedarville.
Clover Leaf	Brown Bros.	Newport.

LIST OF STATE CHEESE BRANDS ISSUED DURING THE YEAR, ETC.— HERKIMER COUNTY —(*Continued*).

NAME OF FACTORY.	Applicant.	Post-office.
Clover Valley	C. A. Ford	Little Falls.
Columbia Centre	N. J. Harter	Columbia.
Cold Brook	E. D. Connor	Cold Brook.
Cold Creek	Isaac Fox	Dolgeville.
Cold Spring	Thos. B. Quinlavin	Litchfield .
Cook, Ives & Co	Andrew Lambert	Salisbury.
Countryman	G. Veitch	Herkimer.
Craine's Corners	T. C. Swift	Jordanville.
Denison's Corners	Sarah A. Getman	Mohawk.
Dividing Ridge	R. G. Starkweather	Jordanville.
East Schuyler	W. W. Hall	East Schuyler.
Eatonville	T. H. Dapson	Little Falls.
Edwards	John Edwards	Prospect.
Elizabethtown	A. E. De Garmo	Ilion.
Fairfield Association	T. Atkins	Little Falls.
Fairfield Centennial	A. McKerrow	Middleville.
Finks Basin	D. H. Burrell & Co	Little Falls.
Fulmer Creek	A. R. Petrie	Mohawk.
Getman, M.	Mrs. S. A. Getman	Mohawk.
Gilt Edge	E. C. Hall	Frankfort.
Gray	A. E. Snyder	Gray.
Gulph	Jas. Donohoe	Gulph.
Hassenclever	W. J. Fitzgerald	Newport.
Henderson Association	T. C. Swift	Jordanville.

Herkimer	Wm. Kruger	Herkimer.
Hill	L. G. Rankin	Little Falls.
Hinckley, G.	E. H. Hughes	Gravesville.
Home Dairy	Homer Finster	East Schuyler.
Jones, E. E.	E. E. Jones	Centre.
Jordanville.	J. M. Haumer	Jordanville.
Kast Bridge	Alvin Countryman	Countryman.
Kay	Jas. H. Ives	Little Falls.
Laning	W. B. Laning	Russia.
Lints, S. P., Jr	S. P. Lints, Jr	East Schuyler.
Little Falls	Chas. Shant	Little Falls.
Little Lakes	H. C. Brockway	Richfield.
McArthur, D.	D. McArthur	Grant.
McNierny	Jos. McNierny	Newport.
Maple Grove	John W. Windecker	Little Falls.
Mather, A. B.	D. S. Willoughby	Norway.
Middleville	A. W. Ford	Middleville.
Millers Mills.	L. J. Miller	Millers Mills.
Moore, Miles	Miles Moore	Russia.
Murphy, John C	John C. Murphy	Norway.
New Manheim	John Garlock	Little Falls
Newport Hill	W. A. Brayton	Poland.
Newville	Jacob Zoller	Little Falls.
North Litchfield	H. H. Davis	North Litchfield.
North Winfield	C. T. Wheelock	North Winfield.
Norway	H. C. Nichols	Norway.
Norway Association	Frank Turck	Newport.
Ohio Building	T. E. Curtis	Ohio.
Old Fairfield	W. E. Wartman	Fairfield.

LIST OF STATE CHEESE BRANDS ISSUED DURING THE YEAR, ETC. — HERKIMER COUNTY — (*Concluded*).

NAME OF FACTORY.	Applicant.	Post-office.
Old Salisbury	Jepthah Hand	Salisbury.
Paine's Hollow	Geo. Van Slyke	Edicks.
Poland	John B. Read	Poland.
Quinlaven	T. B. Quinlaven	Litchfield.
Ransom, C. W.	Chas. W. Ransom	Dolgeville.
Ricard	John Ricard	Cullen.
Rising Star	N. H. Conrad	Paines Hollow.
Ruby	C. G. Babcock	Newport.
Sand Hill	Robt. Wood	Herkimer.
Schuyler Centennial	W. V. Minott	Minott.
Shed Brook	C. G. Babcock	Newport.
Shell's Bush	Ira L. Jones	Herkimer.
Short Lots	W. W. Richardson	West Schuyler.
Small's Bush	Adam Casler	Little Falls.
Snell's Bush	Jacob Zoller	Little Falls.
Springer	Geo. Springer	Deck.
Star	David Gordon	Countryman.
Staring	Gilbert Staring	Deck.
Sterling Creek	C. G. Babcock	Newport.
Sunrise	Giles D. Read	Cold Brook.
Trout Brook	Chas. F. Hines	Cold Brook.
West Schuyler	John M. Budlong	West Schuyler.
West Winfield Creamery	C. Vagts	West Winfield.
Whipple	B. A. Whipple	Van Hornesville.

White Creek	Jas. Baird	Newport.
Young, L. D	L. D. Young	Warren.
Zoller No. 2	Jacob Zoller	Little Falls.
999	W. McKerrow	Middleville.

JEFFERSON COUNTY.

Ayers	I. H. Phippies	Rices.
Babcock	C. V. Cheney	Felts Mills.
Ball, E.	H. C. Ball	Watertown.
Barrott	H. H. Barrott	Mannsville.
Bay View	Jas. Read	Pillar Point.
Belleville	Overton & Co	Belleville.
Bickelhaupt Combination No. 12	A. Bickelhaupt	Redwood.
Brookside	J. Flanders	Rodman.
Camp's Mills	Chas. B. Arnold	Sacketts Harbor.
Central	Chas. C. Mearns	Pillar Point.
Champion Village	F. R. Knowles	Champion.
Cloverdale	Albert Townsend	Philadelphia.
Cloverdale	A. E. Gove	Pamelia Four Corners.
Cold Brook	W. F. Dollinger	Omar.
Cold Spring	C. A. Overacker	Redwood.
Cooper, I. C., Nos. 1, 2, and 3	I. C. Cooper	Theresa.
Eames	Henry C. Eames	Watertown.
East Boylston	Geo. D. Eggleston	Lorraine.
East Rodman	F. P. Dunaway	East Rodman.
Empire State	R. R. Grant	Clayton.
Evans Mills	Daniel Walrath	Evans Mills.
Excelsior	Geo. W. Northrup	Perch River.
Devior's Corners	Jas. Farley	Carthage.

NAME OF FACTORY.	Applicant.	Post-office.
Diamond	Hugh Moy	Diamond.
Drill Well	C. W. Cheney	Sterlingville.
Fairview	R. P. Grant	Clayton.
Farmers	R. P. Grant	Clayton.
Fillmore Bros.	H. H. Fillmore	Woodville.
Flat Rock	G. W. Augsbury	Plessis.
Fox Creek	B. W. Hentze	Three-Mile Bay.
Grindstone Island	R. P. Grant	Clayton.
Hadsell & Moore	Geo. E. Orvis	Felts Mills.
Hill Spring	Fred. D. Carris	Omar.
Howard	D. H. Schell	Stone Mills.
Indian River	L. B. Gibbs	North Wilna.
Klondike	Peter Weber	Antwerp.
Lorraine Village	M. H. Fox	Lorraine.
McNitts	F. H. McNitt	Copenhagen.
Maple Grove	L. S. Pitkin	Lorraine.
Matturas Bros.	Jas. Seaman	Belleville.
Maxon, P. S.	P. S. Maxon	Adams Centre.
Natural Bridge	Wm. Hunt	Natural Bridge.
New Henderson	Benj. Worthingham	Henderson.
North Adams	Helen M. Halloway	Adams Centre.
North Rodman	Jacob Davis	Dillin.
Northville	W. A. Denny	Klondike.
O. K.	F. A. Knapp	Great Bend.

Ontario	W. Walsworth	Sacketts Harbor.
Orleans Centre	H. W. Waterman	Lafargeville.
Orleans Valley	R. P. Grant	Clayton.
Pamelia Centre	S. L. Gilette & Son	Watertown.
Parkinson	P. C. Parkinson	Watertown.
Perry	L. S. Perry	Limerick.
Philadelphia	Wm. Flath	Philadelphia.
Pillar Point Union	M. W. Timmerman	Dexter.
Pitkin	L. S. Pitkin	Lorraine.
Rayhill	Frank Albertson	Henderson.
Riverside	J. P. Carpenter	Ox Bow.
Rosiere	L. E. Branche	Rosiere.
Salisbury No. 2	Brayton Salisbury	Pulaski.
Sandy Creek Valley	A. D. Boyd	Rodman.
Scotch Brook	C. C. Cooke	Cape Vincent.
Silver Creek	F. N. Pettingill	Tremains.
Smith, B. P., & Son	Jerome Pierce	Black River.
Smithville	Mrs. J. S. Ebblie	Smithville.
South Champion	Chas. S. Shedd	South Champion.
Spring	I. G. Smith	Philadelphia.
Springer	R. R. Kirkland	Redwood.
Spring Valley	W. S. Kyes	Philadelphia.
Star	A. O. Pennington	Antwerp.
Stone, E. L., Nos. 1 and 3	E. L. Stone	Mannsville.
Stone Mill Union	Ervin A. Andrus	Stone Mills.
Sunny Side	L. A. & A. E. Helmer	Evans Mills.
Thistle	R. R. Kirkland	Redwood.
Three Mile Bay	J. Wells Taft	Three-Mile Bay.
Trout	Talcott, Parker & Kettle	Adams Centre.

LIST OF STATE CHEESE BRANDS ISSUED DURING THE YEAR, ETC.— JEFFERSON COUNTY —(*Concluded*).

NAME OF FACTORY.	Applicant.	Post-office.
Trout Brook	D. C. Chaumont	Natural Bridge.
Tylerville	Frank Stockwell	South Rutland.
Waldo, J. W.	D. A. Goodrich	South Champion.
Watertown Valley	Lafayette Polley	Burrs Mills.
West Carthage	Chas. E. Besha	Carthage.
Whalen, Robt	Robt. Whalen	Wilna.
William, E. J.	M. A. Stackel	Rutland.
Wind Mill	Geo. B. McMullin	East Houndsfield.
Winona	Wm. H. Anthony	Winona.
Woodville	N. Wood & Sons	Woodville.
Thousand Islands	R. P. Grant	Clayton.
	LEWIS COUNTY.	
Alger	Geo. S. Alger	Martinsburgh.
Anken	C. Frank Anken	Constableville.
Arctic Union	Fred Shaver	Indian River.
Beach Hill	Albert E. Merz	New Bremen.
Blum No. 2	A. Blumm	Talcottville.
Boston Brand	B. J. Goutremont	Windecker.
Carpenter	J. H. Carpenter	Turin.
Castorland	S. L. Hirschey	Castorland.
Cedar Spring	J. L. Beach	Watson.
Champion Spring	C. Hirschey	Beaver Falls.

Chrestien, F. N.	F. N. Chrestien	Camden.
Cloverdale	Alfred Blum	Leyden.
Clover Valley	W. S. Benton	New Bremen.
Cold Spring	Chandler E. Merz	Croghan.
Collinsville	H. J. Roberts	Collinsville.
Copenhagen	Cook & Otis	Denmark.
Croghan	Albert Henry	Croghan.
Crown Brand	A. & H. E. Cook	Denmark.
Dairy Hill	David Miller	Constableville.
Eagle	E. G. Graves	Lowville.
Erie	Emory Draper	Natural Bridge.
Excelsior	Eugene Alexander	Harrisburgh.
Farmers Choice	W. S. Benton	New Bremen.
Far View Spring	W. H. Ingersoll	Port Leyden.
Fish Creek	Frank Middlemiller	Constableville.
Forks	J. E. Murphy	Montague.
Gilt Edge	M. G. Fassett	West Martinsburgh.
Glendale	Rudolf Regetz	Glenfield.
Gowdy	F. C. Gowdy	West Martinsburgh.
Grass Valley	Jas. E. Allen	Constableville.
Haller	Willis A. Haller	Beaver Falls.
Harter	P. A. Harter	Copenhagen.
High Mark	W. H. Fitch	Lowville.
High Market	Eugene Case	High Market.
Houseville	J. H. Smith	Houseville.
Independence	Lyman Burdick	Glendale.
Jerden Falls	C. Yousey	Jerden Falls.
Katsmayer	Wm. W. Katsmayer	Mohawk Hill.
Kirschnerville	Nicholas Keifer	Kirschnerville.

LIST OF STATE CHEESE BRANDS ISSUED DURING THE YEAR, ETC.— LEWIS COUNTY —(*Concluded*).

NAME OF FACTORY.	Applicant.	Post-office.
Lampher, H. B.	Howard Lampher	Copenhagen.
Legal Tender	Jas. E. McGrath	Turin.
Leonard	Chas. P. Leonard	Lowville.
Leyden Cheese Association	L. S. Loomis	Locust Grove.
Lindsay, Wm.	J. C. Croniser	Florence.
Lowville	J. A. Merz	Lowville.
Malcomb	D. Karlen	Boonville.
Maple Ridge	L. J. Benton	Martinsburgh.
Meadow Brook	Uriah Fitch	Pasadena.
Miller	Michael Heiley	Constableville.
Mohawk	F. Kranbuhl	Constableville.
New Boston	T. W. McGrath	New Boston.
New Columbia	Geo. F. Butts	Harrisburgh.
New Model	Robt. G. McCuen	Copenhagen.
Nohle	Constant W. Nohle	West Martinsburgh.
Petrie	Henry Petrie	Turin.
Pinckney Corners	E. A. Harding	Pinckney Corners.
Plummer	Geo. Plummer	Constableville.
Rector	J. W. Barnes	Rector.
Regetz	John H. Regetz	Constableville.
Renaux	A. N. Renaux	Croghan.
Rising Star	Cook & Otis	Denmark.
River St.	G. H. Monroe	Copenhagen.
Roaring Brook No. 2	Fred H. Loucks	Lowville.

Searl, M. E.	M. E. Searl	Martinsburgh.
Searl No. 1	Geo. Searl	Lowville.
Sharp	J. H. Searl	Lowville.
Silver Spring	D. Karlen	Boonville.
Sins & Bierley	Jos. Sins	West Leyden.
South Harrisburgh	C. C. Day	Windecker.
Spring Brook	M. L. Hoffman	Lyon Falls.
Spring Hill	F. E. Klossner	Port Leyden.
Standring	J. E. Knapp	Deer River.
Staring	Willard Higby	Houseville.
Sulphur Spring	J. H. Searl	Lowville.
Swiss Creek	Hiram Gowdy	Naumburgh.
Union of Pinckney	R. B. Cramer	Barnes Corners.
Valley Dale	Fred N. Burns	Bellwood.
Valley Spring	Fred H. Loucks	Lowville.
Welsh Hill	E. H. Evans	Turin.
West Harrisburgh	Mrs. W. A. Wheeler	Bellwood.
West Leyden	M. J. McGrath	West Leyden.
Williams No. 3	L. D. Fox	Barnes Corners.

LIVINGSTON COUNTY.

Hunt's	Young & Young	Fillmore.
Kesequa	Sarah Wheeler	Dalton.
Nunda	Young & Young	Fillmore.
Tuscarora	Young & Young	Fillmore.

MADISON COUNTY.

Baldwin	A. M. Nichols	West Edmeston.
Beaver Creek	E. D. Lamb	Unadilla Forks.

NAME OF FACTORY.	Applicant.	Post-office.
Blanding	F. Blanding	Hubbardsville.
Bradley Brook	R. J. Padgett	Eaton.
Bridgeport	John Durst	Bridgeport.
Caslers, M. D	Mutual M. & C. Co	New York city.
Crystal Spring	J. Tucker	Alene.
Erieville	C. E. Maynard	Erieville.
Excelsior	Geo. H. Daniels	Chittenango.
Hamilton	John Harmon	Hamilton.
Hollenbeck	R. J. Hollenbeck	Peterboro.
Ladd, Dan	Dan Ladd	Canastota.
Lamb, E. D.	E. D. Lamb	Unadilla Forks.
La Munion & Clark	A. J. La Munion	Munnsville.
Lebanon Milk Station	Manhattan Dairy Co	New York city.
Leonardsville	G. M. Rainey	Leonardsville.
Lenox Mills	Buyea & Miller	Lenox.
Madison Centre	F. Blanding	Hubbardsville.
Maple Grove	Elmer Johnson	Lakeport.
Marsh	C. O. York	Brookfield.
Morrisville	D. A. Hopkins	Morrisville.
Morrisville Milk Station	De Mott Crandall	Morrisville Station.
Nelson Flats	W. D. Histed	Nelson.
North Cazenovia	P. H. Wager	Chittenango.
Oneida Valley	Wm. McAdam	Oneida Valley.
Quaker Basin	John Hunt	De Ruyter.

Paramount	J. P. Davis	Nelson.
Perryville Milk Association	C. A. Buckingham	North Woodstock.
Peterboro	R. J. Warcup	Peterboro.
Pleasant Valley	Levi Miller	Peterboro.
Poolville Creamery	H. J. Spencer	Poolville.
Randallsville	John Harmon	Hamilton.
Reservoir	S. D. Burdick	De Ruyter.
Ridgeville	Thos. Vingan	Whitelaw.
River Forks	Wendell Hamlin	Unadilla Forks.
Siloam	A. E. Miller	Siloam.
Solsville	A. D. Eames	Solsville.
South Hamilton	F. Blanding	Hubbardsville.
Stevens	C. G. Stevens	Georgetown.
Temple	I. A. Wager	North Brookfield.
Union	M. H. Morgan	Brookfield.
Webster Station	Warren Newton	Webster Station.
West Hill	West Hill B. & C. Co	Chittenango.

MONROE COUNTY.

East Hamlin	W. H. Hamlin	East Hamlin.

MONTGOMERY COUNTY.

Ames	A. B. Miller	Ames.
Bowman's Creek	Peter McEwan	Marshville.
Cayudatta	A. P. Wemple	Fonda.
Christman, G. H.	G. H. Christman	St. Johnsville.
Doxstader	Wm. Doxstader	Palatine Bridge.
Dunkel, Albert	Gustave Buchholtz	Fort Plain.
Flat Creek	J. J. Weaver	Flat Creek.

LIST OF STATE CHEESE BRANDS ISSUED DURING THE YEAR, ETC. — MONTGOMERY COUNTY — (*Concluded*).

NAME OF FACTORY.	Applicant.	Post-office.
Fort Willett	Jacob Zoller	Little Falls.
Getman	C. Getman	Stone Arabia.
Lyker's Corners	John V. Lyker	Lykers.
Maple Grove	Francis H. Pruyn	Glen.
Minaville Association	W. Walrath	Minaville.
Mohawk	D. Dockstader	Palatine Bridge.
Nellis, A.	Jacob C. Nellis	Palatine Bridge.
Palatine Union	Philip G. Yost	McKinley.
Root	J. B. Gove	Rural Grove.
Slate Hill	Alvah Gray	Ephratah.
Smith Creek	J. Harry Smith	Nelliston.
Stone Arabia	Albert Kilts	Stone Arabia.
Tribes Hill	W. F. Getman	Tribes Hill.
Van Deusen, Dewitt	Dewitt Van Deusen	Montgomery.
Zoller	Jacob Zoller	Little Falls.
ONEIDA COUNTY.		
Alexis	David E. Karlen	Boonville.
Augusta	P. P. Powers	Augusta.
Augusta Valley	John W. Skerritt	Vernon Centre.
Baker	Pauline Baker	Camden.
Blanchard	H. E. Blanchard	Vernon.
Blue	Miles Moore	Russia.

Blue Brook	Roscoe Coon	Ava.
Bridgewater	E. D. Lamb	Unadilla Forks.
Brodock	Andre Brodock	Plains.
Broome	Sam Kappler	West Branch.
Castle, G.	H. D. Morehouse	Ava.
Christian, A.	C. A. Bartell	Florence.
Christien, F. N.	F. N. Christien	Camden.
Cold Spring	Ben. L. Coon	Remsen.
Cornish	J. D. Morris	Camden.
Deansville	J. H. Gazley	Deansboro.
Deerfield Centre	J. J. Donnafield	South Trenton.
Delta	C. N. Bathrick	Delta.
Doxstader	Chas. Roberts	Stacys Basin.
Eldreds, Z.	Z. Eldred, Jr.	Bridgewater.
Farmers	E. D. Franklin	North Western.
Fitch & Bacon	W. E. Golly	Verona.
Floyd Hill	John Roscup	East Floyd.
French Road	Jones & Hughes	Summus.
F. T.	F. Teuscher	North Western.
Green's Crossing	J. C. Stein	New York city.
Greggains, Wm	Wm. Greggains	Glenmore.
Hatches Corners	Alex. Kirkpatrick	Rome.
Hayes	Wm. I. Cayes	Hawkinsville.
Hennessy, J. F.	J. F. Hennessy	East Florence.
Hillside	Melvin Sergeant	Ford.
Jackson	W. D. Jackson	Boonville.
Jackson Valley	A. J. Hoffman	Boonville.
Kappler	Sam Kappler	Lee Centre.
Karlen's	D. Karlen	Boonville.

LIST OF STATE CHEESE BRANDS ISSUED DURING THE YEAR, ETC. — ONEIDA COUNTY —(*Continued*).

NAME OF FACTORY.	Applicant.	Post-office.
Kellogg	W. S. Jennings	Sangerfield.
Kent, B. H.	P. O. Jones	East Steuben.
King, A. S.	A. S. King	Norwich Corners.
Lowell	F. J. Brill & Co	Lowell.
McFarland	E. E. McFarland	Rome.
Marcy Centre	Geo. R. Wright	Marcy.
Merry, G.	G. Merry	Verona.
Mickel Farm	S. S. Mowers	Holland Patent.
Milk Station	Arthur Spurr	Vernon.
Miller Branch	A. E. Vaughan	Camden.
Mullin Hill	Jacob Karlen	Rome.
Newark Milk & Cream Co	C. E. Histed	South Columbia.
New London	J. J. Senn	New London.
North Bay	Jas. Krum	North Bay.
North Bridgewater	Andrew Knauer	North Bridgewater.
North Gage	Ellen Welch	North Gage.
North Steuben	N. H. Folts	North Steuben.
Oriskany Union	Kappler & Teuscher	Stanwix.
Paris Association	E. B. Lohnus	Paris Station.
People	John Finn	Point Rock.
Peck's Corners	J. H. Gazley	Deansboro.
Pillmore	W. F. Pillmore	Westernville.
Porter	C. W. Porter	North Western.
Private Dairy	T. W. Parkinson	North Bridgewater.

Quaker Hill	Henry Ely	West Branch.
Queen of Oneida	Albert Brown	Vienna.
Rathbun	Chas. Rathbun	Rome.
Remsen	Samuel W. Roberts	Remsen.
Ridge Mills	Robt. McAdam	Rome.
Rome Cheese Association	G. N. Slone	Ridge Mills.
Sanquoit Creamery	Mutual M. & C. Co.	East Schuyler.
Saulpaugh	C. H. Saulpaugh	Lee.
Sheehan	Herbert A. Johnson	Rome.
South Trenton	Geo. S. Williams	South Trenton.
South Western	Chas. D. Parsell	Big Brook.
Spring Brook	W. J. McComb	Boonville.
Steuben Association	Nelson N. Wood	Steuben.
Steuben Centre	P. C. Mills	Steuben.
Stevens, E. L.	Vincent Tuthill	Ava.
Stone Road	Jno. J. Davis	Cassville.
Storey	Storey Bros.	Westmoreland.
Taberg	Geo. J. Haas	Taberg.
Thomas, G. D.	G. D. Thomas	Camroden.
Thomas, R. E.	Jones & Hughes	Summus.
Verona	Mrs. T. Breckenridge	Higginsville.
Walsworth	David Blum	Delta.
Waterbury	Jas. Kirkland	Florence.
Waters	Annie M. Waters	Point Rock.
West Ava	P. E. Adams	Ava.
West Branch	David Karlen	West Branch.
West Camden	A. Cornish	Camden.
West Canada Creek	Sam Baird	Poland.
Westernville	John McCurn	Westernville.

LIST OF STATE CHEESE BRANDS ISSUED DURING THE YEAR, ETC. — ONEIDA COUNTY —(*Concluded*).

NAME OF FACTORY.	Applicant.	Post-office.
West Vienna	J. H. Meays	Vienna.
Willow Grove	Ivie Baird	Trenton.
Witley, H. G.	Mrs. D. Teuscher & Sons	Stanwix.
Wittwers, S.	S. Wittwers	Colemans.
	ONONDAGA COUNTY.	
Brewster	Geo. Ottman	Cicero.
Cicero	Dennis Smith	Cicero.
Cicero Centre	O. J. Daniels	Cicero Centre.
Clay Centre	F. M. Burlis	Euclid.
Dot's Home	F. E. Dawley	Fayetteville.
North Manlius	W. H. Kimball	North Manlius.
Pompey Centre Cream Co	Robt. Moore	Pompey Centre.
Riverside	F. W. Church	Belgium.
Staring	B. F. Staring	Kirkville.
Tully	C. J. Cummings	Tully.
	ONTARIO COUNTY.	
Honeoye Valley	S. S. Williams	Honeoye.
Naples	J. W. Nellis	Naples.
	ORLEANS COUNTY.	
Barre	Wm. H. Stoney, Jr.	Barre Centre.
Clarendon	Church & Tuttle	Clarendon.

Holley	F. W. Church	Belgium.
Kent	John B. Sherwood	Kent.

OSWEGO COUNTY.

Albion	E. H. Burch	Salmon River.
Amboy Centre	Robt. Foils	Amboy Centre.
Battle Island	C. L. Potter	Fulton.
Bowen's Corners	Wm. Kesler	Bowens Corners.
Castor, Nos. 1, 2 and 3	Geo. L. Castor	Pulaski.
Central Square	H. E. Beeby	Central Square.
Cold Brook	Stephen Williams	Amboy Centre.
Cold Spring	G. H. Simons	Redfield.
Colosse	C. H. Pierce	Colosse.
Dewey	G. D. Trimble	Palermo.
Eagle	G. A. Fitzgerald	Butterfly.
East Scriba	J. W. Dexter	Scriba.
Empire	F. C. Northrup	Constantia.
Empire	G. B. Cusack	Clifford.
Finster	J. J. Miller	Pulaski.
Gilberts Mills	C. H. Burlis	Gilberts Mills.
Granby Centre	G. B. Cusack	Clifford.
Hannibal	E. B. Tucker & Sons	Hannibal.
Hastings	N. W. Wright	Hastings.
Henderson	C. P. Burch	Altmar.
Hess	H. S. Casler	West Amboy.
Hillside	Orwell B. & C. Co.	Orwell.
Hinmansville	Edward J. Buckley	Hinsmansville.
Howardville	J. R. Davis	Howardville.
Ingersoll, E. M.	E. M. Ingersoll	Lacona.

LIST OF STATE CHEESE BRANDS ISSUED DURING THE YEAR, ETC.— OSWEGO COUNTY —(*Concluded*).

NAME OF FACTORY.	Applicant.	Post-office.
Johnson, G. Y.	Mrs. Alice Johnson	Williamstown.
Le Clair	F. P. Le Clair	Lacona.
Loomis, W. M.	W. W. Loomis	Ingalls.
McKinney, A. C.	A. C. McKinney	Orwell.
Mallory	Jared Mallory	Mallory.
Mayflower	Andrew Ott	Redfield.
Mayflower	H. E. Potter	West Monroe.
Molino	Brayton Salisbury	Pulaski.
New Haven	Emile George	New Haven.
North Road	W. A. Clark	Walker.
North Scriba	Geo. H. Barnard	Lycoming.
North Williamstown	W. K. Haggerty	Oswego.
Olmstead, A. E.	A. E. Olmstead	Orwell.
Oneida River	P. Burlis	Caughdenoy.
Palermo	D. H. Trimble	Palermo.
Parish B. & C. Co.	W. H. Baker	Parish.
Parish Centre	Roy Washburn	Parish.
Peets Corners	Anthony Sauter	East Palermo.
Pennellville	C. F. Barnaskey	Pennellville.
Phoenix No. 1.	Albert P. Merriam	Phoenix.
Porter	Geo. B. Porter	New Haven.
Pulaski	W. C. Holmes	Pulaski.
Sandy Creek B. & C. Co.	Sandy Creek B. & C. Co.	Sandy Creek.
South Richland No. 2	J. J. Miller	Pulaski.

Salisbury No. 1	Brayton Salisbury	Pulaski.
South Hannibal	G. D. Trimble	Palermo.
South West Oswego	C. E. Woodworth	S. W. Owego.
Stevens, Allen M.	A. M. Stevens	Orwell.
Stevens & Yerden	R. A. Stevens	Greenboro.
Stone Quarry	John Pifer	Arthur.
Union Square	Geo. B. Vanderwerker	Union Square.
Vant	G. D. Trimble	Palermo.
Weeks, John M.	John M. Weeks	Prattham.
West Monroe Star	J. W. Mutter	West Monroe.
Wilcox	Milo Wilcox	Oswego Falls.

OTSEGO COUNTY.

Allen's Lake	John Mack	Richfield.
Barstow's Corners	H. C. Brockway	Richfield.
Brainard's Corners	H. C. Brockway	Richfield.
Brockway, H. C., No. 1	H. C. Brockway	Richfield.
Brown No. 7	H. C. Brockway	Richfield.
Burke, Geo. F.	Geo. F. Burke	Burlington.
Cherry Valley	J. H. Harrison	Cherry Valley.
Clarksville	R. G. McRorie	Middlefield.
Co-operative	F. W. Russell	Garrattsville.
East Springfield	Wilkinson, Gaddis & Co.	Newark, N. J.
Edmeston	H. C. Brockway	Richfield.
Edmeston Dairy	A. E. Wielage	New York city.
Eldred, E.	R. G. Peet	Mt. Vision.
Elk Creek	Chas. Hanor	Elk Creek.
Fall Brook	R. G. Peet	Mt. Vision.
German	Aug. Aufmuth	Fly Creek.

LIST OF STATE CHEESE BRANDS ISSUED DURING THE YEAR, ETC. — OTSEGO COUNTY —(*Concluded*).

NAME OF FACTORY.	Applicant.	Post-office.
Gilbertsville	J. H. Gilbert & Co.	Gilbertsville.
Gregory, S. C.	C. P. Root	Gilbertsville.
Hartwick	F. B. Rainey	Hartwick.
Hartwick Seminary	C. P. Root	Gilbertsville.
Hinman Hollow	Jerry Fogarty	Milford.
Holdridge	A. Holdridge	West Burlington.
Hubbel Hollow	Edward Talbot	Middlefield.
Huntley	H. C. Brockway	Richfield.
Hyder Creek	H. C. Brockway	Richfield.
Johnson	D. C. Johnson	Burlington Flats.
Kinney, J. P.	Mrs. J. P. Kinney	Snowdon.
Lena	R. G. Peet	Mt. Vision.
Lentsville	W. L. Wicks	Lentsville.
Lloydsville	K. J. Wing	Unadilla Forks.
Milford	C. S. Barney	Milford.
Milford Centre	R. G. Peet	Mt. Vision.
Morris	E. R. Hunt	Morris.
New Lisbon	C. P. Root	Gilbertsville.
Oaksville	John J. Rider	Schuylers Lake.
Oneonta Plains	Fred Taber	Oneonta.
Pashley's, G. C.	G. C. Pashley	Burlington.
Patten	John D. Rainey	Hartwick.
Pierstown Valley	M. H. Wedderspoon	Cooperstown.
Plainfield Union	D. D. Lamb	Plainfield Centre.

Plainfield Union Branch	D. D. Lamb	Plainfield Centre.
Pleasant Valley	H. C. Brockway	Richfield.
Rider, J. J.	J. J. Rider	Schuylers Lake.
Root's	C. P. Root	Gilbertsville.
Roseboom	J. H. Harrison	Cherry Valley.
Rose Hill	Hiram Gilmore	Schuylers Lake.
Schuylers Lake	J. J. Rider	Schuylers Lake.
Shamrock	Chas. F. Freer	Gilbertsville.
South Hartwick	C. P. Root	Gilbertsville.
Sponenburgh, W. H.	W. H. Sponenburgh	Fly Creek.
Stanley	C. J. Hinds	Middlefield Centre.
West Exeter No. 9	H. C. Brockway	Richfield.
Westford	C. E. McRorie	Westford.
Westville	Wm. H. Burch	Westville.
Wilber Lake	J. W. Taylor	Oneonta.
Wileytown	L. P. Young	Oaksville.
Wilmarth	H. C. Brockway	Richfield.
Worcester	C. P. Root	Gilbertsville.
Wright, Nos. 1, 5, 7 and 10	E. W. Wright	Burlington Flats.

ST. LAWRENCE COUNTY.

Belleville	E. A. Sheffner	Edwards.
Calaboga	Chas. C. Donald	Redwood.
Canton	A. J. Gilson	Pyrites.
Cheshire	W. E. Fairbanks	De Kalb Junction.
Cream of the Valley	A. W. Overacker	Gouverneur.
East De Kalb	G. A. Lalone	De Kalb Junction.
Edwards Village	A. P. Brown	Edwards.
Elm Grove	Elmer J. Grant	Simpson.
Gouverneur Village	J. F. Hodgkin	Gouverneur.

NAME OF FACTORY.	Applicant.	Post-office.
Hodgkin	John H. Berry	Spragueville.
Island Branch	J. A. Mills	Gouverneur.
Jenney Creek	P. G. Kennie	Pitcairn.
Maple Ridge	Frank Fanning	Richville.
Marvin Hill	More, Johnson & More	North Hammond.
Red Star	C. F. Woods	Bigelows.
Richville	Renford Stevenson	Richville.
Rock Bottom	C. A. Royce	Richville.
Scotch Settlement	Chris. Dugan	Rossie.
Somerville	Jas. W. Marshall	Somerville.
South Fowler	Perley Covey	Spragueville.
South Gouverneur	John Dugan	Gouverneur.
South Hermon	Geo. L. Bush	Gouverneur.
Steele's Corners	John H. Berry	Spragueville.
West Fowler	C. W. Fenner	Spragueville.
West Gouverneur	L. J. Goodison	Elmdale.
West Hermon	R. M. Mills	Hermon.
	Schoharie County.	
Argusville	C. P. Root	Gilbertsville.
Enterprise	J. C. Proper & Co.	Eminence.
Warnerville	Geo. A. Shafer	Cobelskill.
	Schuyler County.	
Sugar Hill	Lucy Putnam	Sugar Hill.

Atlanta	G. W. Walden	Atlanta.
Bennetts Creek	W. C. Bassett	Bennetts Creek.
Big Creek	J. W. Bennett	Howard.
Borden	Chas. W. Carpenter	Borden.
Call Hill	D. A. Oakes	Purdy Creek.
Cloverdale	C. J. Howden	Lawrenceville, Pa.
Cloverdale No. 3	Lynn Wheeler	Young Hickory.
Cloverdale No. 9	Gustave Bertch	North Fork, Pa.
Cloverdale No. 10	Fred Millett	Rexville.
Cloverdale No. 11	Leon Mills	Greenwood.
Cloverdale No. 18	Elmer White	Bradford.
Cold Spring	Geo. M. Grow	Alfred Station.
Dryden Ridge	Snyder & Clark	Andover.
East Troupsburg	Jas. McKinley	Troupsburg.
Guinn	Henry Schwab	Andover.
Haskinville	Silsbee & Bowen	Haskinville.
Hedgesville	Searl & McStay	Woodhull.
Highup	Searl & McStay	Woodhull.
Hopper	Searl & McStay	Woodhull.
Howard	Bennett & Glover	Howard.
Jasper	T. J. Carmody & Co.	Cuba.
Murray	Bernard Murray	Andover.
Neil's Creek	E. P. Clymo	Avoca.
Spaulding, Hiram	Hiram Spaulding	Howard.
Squab Hollow	W. H. Cooper	South Troupsburg.
Stephens, Geo. M.	Geo. M. Stephens	Greenwood.
Troupsburg	Jas. McKinley	Troupsburg.
Wallace	I. F. Barnes	Wallace.

LIST OF STATE CHEESE BRANDS ISSUED DURING THE YEAR, ETC.—STEUBEN COUNTY—(*Concluded*).

NAME OF FACTORY.	Applicant.	Post-office.
West Jasper	Searl & McStay	Woodhull.
West Union	C. H. Austin	Whitesville.
White Clover	Wm. Wildrick	Woodhull.
Woodhull	T. J. Carmody & Co.	Cuba.
	SULLIVAN COUNTY.	
Wierck, John P. & Co.	Empire State Dairy Co.	Brooklyn.
	TOMPKINS COUNTY.	
Caroline	R. G. H. Speed	Slaterville.
Cornell University	H. H. Wing	Ithaca.
	WASHINGTON COUNTY.	
South Easton	Gifford & Skiff	South Easton.
	WAYNE COUNTY.	
Eureka	A. A. Peck	Wolcott.
Huron Crystal Spring	Saml. Cosad	Wolcott.
Red Creek	G. W. Brinckerhoff	Red Creek.
	WYOMING COUNTY.	
Arcade	Geo. E. Hogg	Arcade.
Arcade Centre	W. H. Wilson	Arcade.
Bennington Centre	Richardson, Beebe & Co.	East Aurora.

Cluney	T. E. Cluney	Attica.
East Koy	C. H. Bevier	East Koy.
Elmont	Richardson, Beebe & Co.	East Aurora.
Gainesville	A. L. Tuller	Gainesville.
Green, C. A.	C. A. Green	Warsaw.
Greene, G. A.	G. A. Greene	Dale.
Griffith's	Young & Young	Fillmore.
Java Centre	Richardson, Beebe & Co.	East Aurora.
Johnsonburg	John L. Gibby	Arcade.
Johnsonburg No. 2	John L. Gibby	Arcade.
Johnsonburg No. 3	John L. Gibby	Arcade.
Johnsonburg No. 4	John L. Gibby	Arcade.
North Sheldon	Richardson, Beebe & Co.	East Aurora.
Orangeville Valley	John A. Ahl	Orangeville.
Park	R. Norton Co.	Attica.
Pike Centennial	Mrs. E. B. Willard	Pike.
Punkshire	Franklinville Cheese Co.	Chaffee.
Queen of Valley	Richardson, Beebe & Co.	East Aurora.
Royce	Geo. E. Curtis	North Java.
Sandusky No. 7	J. B. Lewis	Sandusky.
Sandusky No. 11	J. B. Lewis	Sandusky.
Sheldon	Richardson, Beebe & Co.	East Aurora.
South Sheldon	Richardson, Beebe & Co.	East Aurora.
Star, Nos. 1, 2 and 4	T. J. Hubbard	Wethersfield.
Toziers	Richardson, Beebe & Co.	East Aurora.
Wethersfield Springs	G. R. Safford	Wethersfield.
Wing St.	E. O. Wood	Wing.
Yorkshire Centre, Nos. 5, 9, 10, 11, 12 and 16	E. L. Jones	Delevan.

OLEOMARGARINE.

I am pleased to be able to report again this year that oleomargarine is practically not sold in the New York market. In saying this, I mean, it is not openly sold. There are many clandestine sales and I feel warranted in reporting to you that nearly all of these clandestine sales have been found out and that those who indulge in them have been prosecuted or soon will be.

Feeling you should know of the difficulties which we have to encounter in enforcing the statutes against these goods, I will briefly illustrate the method of those who attempt to sell them within the State in violation of our law. An agency will be established just outside of this State, a distributing point, then a party is sent into the State of New York to canvass in certain places, with the view of inducing the dealers to take their goods to sell. They do not go indiscriminately to all stores, but pick those that they think will be most apt to yield to their tempting inducements. Our experience is that these are largely small stores where meat is sold. Occasionally there is an exception to the rule. When the goods are once ordered from the adjoining State, they are sent in boxes or barrels, with few or no marks upon the barrels to distinguish them. For instance: One lot recently obtained by this office came in a barrel, one end of which was covered over with canvas and the barrel was marked, or supposed to contain, vegetables of some kind. When the canvas was cut away it was found to contain ten nice little boxes; inside of each box was ten one-pound prints of oleomargarine. These goods received by the party who is to sell them are placed where they cannot be seen by the casual observer or purchaser and sold to such customers as in the judgment of the vendor would be least apt to suspect their nature. The oleomargarine people are replete in their schemes to avoid the State law. As an illustration: One of the agents within the State of New York recommended to one of his customers that he have a large money drawer made which would hold forty of the pound prints and to

keep them in this money drawer, saying that no agent, if he suspected the presence of the goods, would ever think of looking in a money drawer, or if he did think of that, would hardly have the courage to do so; that his way to receive the agent when he came looking for the goods was to welcome him with the assurance that he was glad to see him so alert in the discharge of his duties and hopeful that he would succeed, etc. But all such methods as these are of no avail. The oleomargarine people are practically out of the State of New York, and must remain so while the State continues to equip itself as it has in the past for this work.

A more recent method of putting goods on sale in this State is illustrated by a case which has recently been made in the city of Buffalo by our agents. A commission merchant in that city was receiving what he called renovated butter from Englewood, Ill. It came into the State branded, as the State law requires renovated butter to be branded as such. He was branding the tubs as required and sending them out to his customers as renovated butter. Our agents found this, upon examination, to be oleomargarine. We took samples from tubs in stock and submitted them to the chemist. At this writing but few of the samples have been analyzed, but they proved to be oleomargarine. We are now doing what we can to determine who is the proper defendant in the case. We have detectives who are at work on the case to determine the fact as to who may have been the party selling to the party within this State, and the party from whom we took the sample is apparently aiding us to the best of his ability to help us find out. At this writing it would seem that he is sincere. It is but fair to state here that the goods were so made as to be well tended to deceive the best judges, and we could hardly have been able to detect them had not the agent been an expert upon that commodity in every sense of the word. The prospects in this case are such as to impress me more deeply than ever with the force of the idea that the

National Government should do something in the way of legislation that would give a State law full control of all food products that may be brought into a State in violation of a State law, whether they be in the original package or not, i. e., the National Government should so provide that any person violating a State law by selling or attempting to sell a food product that is forbidden by such State law, should become amenable to such law, irrespective of any power conferred upon the National Government relative to commerce between the States. It is a notorious fact that certain oleomargarine dealers are resorting to any and all means which they can justify under their code of fairness or morals to place these goods in the markets of all the States in the Union. Their attempts have been so continuous, and in some States so successful, that it has become evident that something must be done to stop the deceit, at least, that is practiced in the sale of these goods by some of the parties to the sales before they reach the consumer. As a result, different views of how to handle the question have been put forth and at present there are two or three that are being agitated before the country, one of which is to use the taxing power of the National Government against oleomargarine colored in imitation or semblance of butter so as to practically prohibit its sale. This would not in any way interfere with the sale of oleomargarine not colored in imitation or semblance of butter, if such commodity be upon the market. Another view is to use that same taxing power against all oleomargarine irrespective of color. Another is for the National Government to provide that when the goods are imported into a State that they shall immediately become subject to the State laws, whether in original importer's package or not, leaving it to the State itself to determine whether the goods shall or shall not be sold, and, if allowed to be sold, how they shall be sold within the State. I am of the opinion that if the principle of taxation be invoked, that it should be invoked against all oleomargarine, because if it is only against that colored in imitation or sem-

blance of butter it will, in my judgment, so legitimatize that product that a State law will probably be ineffective against its sale in the original importer's package, unless the goods are made subject to the State law immediately upon entering the State, otherwise it would have a tendency to lessen the efficiency, if it did not let down the bars altogether, in States like ours in which we are practically excluding the product from the market when in imitation or semblance of butter. I am, therefore, of the opinion, that the last of the three above named schemes for handling the commodity is the one that should be supported by those interested in the question from this State, and such a law should be enacted whether the taxing power is invoked or not, and in conjunction with it. The leading cases that have been decided by the Supreme Court of the United States are two, viz.: 'A Massachusetts case entitled "*In re Plumley,*" in which that court held that the Massachusetts statute which prohibited the sale of the goods, if colored in imitation or semblance of butter, was constitutional; that a State had a right under its police powers to prohibit the manufacture and sale of such a counterfeit; and the other case was the case of *Schollenberger* v. *Pennsylvania,* in which it did not appear to the court that the goods were colored in imitation or semblance of butter. It was carried into the State in original importers' packages, although its sale was prohibited by the laws of Pennsylvania. The United States court held that such a law was unconstitutional as to the commodity in question; the goods having been taxed by Congress, thus becoming a legitimate article of commerce, its sale could not be prohibited in original importers' packages.

I am, therefore, of the opinion that so far as oleomargarine is concerned the tax that has been collected by the National Government is but a bagatelle when compared with the great wrong that has been done to the consuming public by allowing the sale of these goods in this form; and while I admit that the principle of taxing all oleomargarine has had as bad an effect as it possibly can, so far as litigation is concerned, I do not feel sure that when

you confine the taxing to colored oleomargarine only, that it will not affect future decisions so as to weaken the decision in the *Plumley* case above quoted, upon which we must rely for our right to exclude original importers' packages of colored oleomargarine, and I am, therefore, opposed unalterably to that legislation, unless Congress also provides that the goods shall become subject to the laws of the State, immediately upon entering the State, irrespective of the fact that they are in the original importers' packages.

PROCESS BUTTER.

The Legislature of 1899 passed an act regulating the sale of renovated or process butter, which is known as chapter 149, Laws of 1899. It is an amendment to section 27 of chapter 338 of the Laws of 1893. The portion of the amendment applying to process butter reads as follows:

"No person by himself, his agents or employes, shall manufacture, sell, offer or expose for sale, butter that is produced by taking original packing stock or other butter or both and melting the same, so that the butter fat can be drawn off, then mixing the said butter fat with skimmed milk or milk or cream or other milk product and rechurning the said mixture, or that is produced by any similar process and is commonly known as boiled or process butter, unless he shall plainly brand or mark the package or tub or wrapper in which the same is put up, in a conspicuous place with the words 'renovated butter.' If the same shall be put up, sold, offered or exposed for sale in prints or rolls, then the said prints or rolls shall be labeled plainly with printed letters in a conspicuous place on the wrapper with the words 'renovated butter.' If the same is packed in tubs or boxes or pails or other kind of a case or package the words 'renovated butter' shall be printed on the top and side of the same in letters, at least, one inch in length, so as to be plainly seen by the purchaser. If such butter is exposed for sale, uncovered, not in a package or case, a placard containing the label so printed shall be attached to the mass of butter in such a manner as to easily be seen and read by the purchaser. No person shall sell, offer or expose for sale, any butter or other dairy product containing a preservative, but this

shall not be construed to prohibit the use of salt in butter or cheese, or spirituous liquors in club or other fancy cheese or sugar in condensed milk."

As soon after the passage of this act as possible I procured samples of what was known to be renovated or process butter and submitted them to our chemists for them to determine the difference between process butter and other butter, chemically. After some work had been done, a given number of samples of process butter were taken and a given number of samples of creamery butter. The samples were numbered so that they could be distinguished and then a portion of them given to each one of the three different chemists to determine the nature of the goods. In each instance the chemist determined which was the process butter and which was genuine butter. After we satisfied ourselves that they could distinguish, we then set about to enforce the law.

Preliminary to this work we sent out a circular letter to all dealers which set forth the portion of the law above quoted and in addition had the following statement:

"Dear Sir.— Your attention is hereby respectfully called to the fact that the Legislature of eighteen hundred and ninety-nine passed an act relative to renovated butter, known as chapter one hundred and forty-nine of the laws of that year. It amends section twenty-seven of the Agricultural Law by adding at the end of that section the following:

* * * * * * * * *

You are hereby notified that the above is now a part of the Agricultural Law and its violation is punishable by both fine and penalty, and that any violation of this law of which this Department has knowledge will be promptly followed by prosecution.

"Very respectfully yours,

"(Signed.) C. A. WIETING,

"Commissioner of Agriculture."

After this circular letter was sent out our men set about to determine the violations of the law. One of the first we found upon the market was an apparent attempt to comply literally, yet

to evade the spirit of the statute. It was a brand of goods known as the "Anchor Brand," made in Elgin, Ill., and was done up in prints. The wrapper in which the butter was done up had upon it a circle, a little larger than a fifty cent piece, and in that circle was an anchor and printed near the periphractic of the circle were the words "Anchor Brand, Elgin, Ill.," all of which was printed in black ink easily discernible. At the other end of the paper were the words "Renovated Butter," printed in yellow ink with the letters scarcely one-quarter the size of the first ones and the color being such that when placed upon yellow butter it could hardly be distinguished, and, in addition to that, that end of the wrapper was folded under so as not to be seen. Dealers were notified immediately that handling this commodity in this form was a violation of the statute. Subsequent investigations lead me to believe that this form of violation has practically ceased. A brand of oleomargarine of the best brand probably made has been sold in this State as process butter and in tubs containing the words printed thereon as required by statute "Renovated Butter." This we have detected, as stated under the head of oleomargarine, and I believe there are but few, if any, violations of this kind at the present time. There seems to be an evident desire on the part of the wholesale dealers of this commodity to test the constitutionality of the State law. To that end they have sent invitations to this office, through their attorneys, for me to make a test case to go to the Court of Appeals to test the constitutionality of the law. This, at all times, I have refused to do, deeming it wise to have that question tested in the courts when it arose fairly in a case where I was trying to enforce the law and with that object alone in view. I do not feel concerned, however, as to any adverse decision upon this question, as the statute simply requires that the vendor shall sell his goods for what they really are, and if they are as good as is claimed they will have no difficulty in disposing of them at fair prices and still let the people know what they are buying.

A notion has prevailed among certain dealers that they were complying with the law in letter and in spirit when the tub from which the renovated butter was being sold had upon it the words "Renovated Butter," as required by statute, notwithstanding, that that tub was out of sight of the purchaser. I have held, as a matter of fact, that the statute contemplated just such a condition of things and provided for it by providing as follows: "Unless he shall plainly brand or mark the package or tub or *wrapper* in which the same is put up, in a conspicuous place with the words 'Renovated Butter.'" Evidently the object aimed at by the word "wrapper" in the above quotation was to defeat just such a scheme as the one above referred to; that when goods sold from a tub so branded, but out of sight of the customer, the wrapper in which the portion was sold must bear the words in a conspicuous place "Renovated Butter."

The question of these frauds, among other questions, has been receiving the attention of the Industrial Commission of the United States. In my capacity as Commissioner of Agriculture of the State of New York, I was requested to submit my views to that Commission upon the present industrial condition in the State of New York and replied to that request as follows:

STATE OF NEW YORK:

DEPARTMENT OF AGRICULTURE.

ALBANY, N. Y., *November* 24, 1899.

Hon. CHAS. E. SACKETT, *Chairman Industrial Commission, Washington, D. C.:*

DEAR SIR.— The request from the clerk of your committee for me to appear before the committee was received some time since, when I was very busy. Upon my request I was excused at that time. I am still quite busy, and, therefore, take this opportunity to make the following suggestions to you, relative to the present condition and needs of the farming community and of the consuming public of this State.

The pursuit of agriculture in New York State is not as profitable as it was from 1860 to 1873, but conditions are improving and it looks to me as though the year 1899 will be more profitable for the farmers of New York State than the preceding years.

From 1860 to 1873 all farm products brought extremely high prices, on account of the great demand caused by the War of the Rebellion. Farm products bringing high prices made the value of lands high and farms were sold at high prices. Many of them were bought on time and mortgaged. After the close of the war the demand for farm products gradually grew less, prices became less and the price of land shrank accordingly, so that many of the farmers of the State of New York who had bought lands and mortgaged them lost them by shrinkage of value.

The main causes for the cheapening of the value of products were the increased supply of cereals, coming from the rapid development of new territory and the extension of railroad facilities, reaching into the newly opened territory, and the greatly reduced rates of transportation of which that new territory received the benefit, and of which New York State has been deprived, and the lack of demand for these products by non-producers and consumers becoming producers and ceasing to be consumers on the market.

To illustrate how rapidly the western territory was developed, I call attention to the fact that reports from the National Government show that the original area of land belonging to the people at large was 1,815,504,147 acres, of which 806,532,362 acres has been alienated. For the year 1897, the following is a table showing the rate of transfer to private ownership, viz.:

	Acres.
To 1884	591,987,814
To 1884	26,834,042
To 1885	20,113,663
To 1886	20,991,967
To 1887	25,111,401
To 1888	24,160,785

	Acres.
To 1889	17,026,092
To 1890	12,665,532
To 1891	10,357,232
To 1892	13,566,552
To 1893	11,801,686
To 1894	10,377,225
To 1895	8,364,300
To 1896	13,174,071

This shows an alienation to private ownership of nearly 23,000 square miles per annum, or 1,305,041 acres per month, or 43,501 acres per day, or 1,812 acres per hour, or 30 acres per minute, that is 1 acre every two seconds. It is fair to estimate that the produce of this land went into direct and immediate competition with the products of the farms of the State of New York, which were valued at from fifty to one hundred and fifty dollars per acre, and which had been farmed until the soil required much fertilizing. The western lands had been untilled, were rich and required no fertilizer. Then, in addition to that advantage, the western farmer was enabled to place his goods upon the eastern markets by paying greatly reduced freight rates, in some cases being able to put his goods on the market for as little money as the eastern farmer had to pay for placing his there.

In a report by Mr. Geo. T. Powell, of the State of New York, upon agricultural conditions and needs, he calls attention to the fact that in 1870 the freight on a bushel of wheat from Chicago to New York was thirty cents, while in 1890 it was reduced to fourteen and one-half cents, a decrease of 52 per cent., and that in the year 1870, the freight from Chicago to New York, by rail, on a bushel of corn was twenty-eight cents, while in 1890 it was reduced to eleven and one-third cents, a decrease of 59 per cent. No similar decrease in freight rates in favor of New York farmers who desired to send their goods to New York markets was made

during that period of time. It has been entirely in favor of the great producing west as against the producers in New York State. This will apply equally as well to other farm products. The results produced in this way are working against the New York farmer and a similar condition of things in other countries is operating against not only the farmer in New York, but all the farmers in the United States. For instance: The great wheat fields of South America, Australia and those that bid fair to be opened in Siberia, make the prospect of the New York farmer raising cereals at a profit quite discouraging. He must, in my judgment, in order to succeed from an agricultural standpoint, turn his attention to other products, possibly, yes, I may say probably, to those that are known as perishable products that cannot be transported a great distance, such as fruits, vegetables, dairy and meat products and some others.

With this end in view the authorities in the State of New York are doing what they can to meet the situation, by causing instructions to be given each year along lines that have a tendency to help the farmer in producing these crops, with the hope in view that they will thus be able to stem the tide that is cityward and possibly turn it back toward the farm. In other words, they are attempting to disseminate sufficient scientific agricultural knowledge among the people so that farming may be considered a profession rather than a drudgery. To this end we are spending thousands of dollars per year.

A notion has prevailed to some extent heretofore to the effect that education unfitted a person for farm life; that, as a result of his education, he was bound to enter into one of the professions. That idea is fast becoming one of the past among New York farmers, as we now have in our State many young men who are well educated who are devoting their knowledge and energies to the work of farming, and who take as great pride in it as in a profession. This makes the outlook somewhat brighter, as such farmers become business men, keeping books in which they have an account with their farm. They understand that in order for

the farm to successfully feed them and those they leave after them they must also feed the farm as they go along, *i. e.,* they cannot rob the soil of its strength without placing back in it something to compensate for what they have taken out.

Should conditions change so that the scope of the market for cereals should be enlarged, for instance, by the annexation of territory, this would be of great advantage to the farmers of New York State, as it would not only make a market for the cereals, but make market for the products of the shop and manufactories of the country, thus enlarging our home market and also making a demand for agricultural products. It has been said that the farmer of New York State is laboring under a load of taxation that is disproportionate. I cannot agree with those who hold this idea. I find upon inquiry into the subject that the average farmer in the State of New York, owning a farm of 100 acres, does not pay a tax to exceed $25. I can hardly accept the proposition that a matter of $25 a year is going to make a difference between good and hard times upon a farm of 100 acres.

In addition to the load that the farmers of New York and other eastern States have been carrying for many years, as above referred to, is the one of adulterated food products, which is of great injury to them from the fact that the imitation and adulterated goods are so manufactured as to resemble the pure goods made by the farmers, and palmed off on the unsuspecting consuming public as the genuine article. This injures the market, to say nothing of the fraud practiced upon the consumer. We have for a number of years been spending much money in giving instruction in making first-class butter and cheese. We believe we have reached the point where we can say that all New York State full-cream cheese are now of a uniform first grade quality, yet we find that manufacturers of inferior goods in other States are imitating the brand which is being placed upon these cheese and placing it on cheese of an inferior quality made in other States. This is a wrong, not only upon the cheese producers of the State of New York, but also a wrong upon the consuming public, and it should

be stopped. I believe that if the National Government should enact a law and provide for its enforcement, to the effect that no food products should be falsely branded as to the State in which they are made, it would stop this fraudulent practice. I believe that the National Government has that constitutional power, under that clause in the Constitution giving them power to regulate commerce between the States.

If this suggestion meets your approval, I sincerely hope you will take such action as will tend to crystallize it into a law. There is another law, I think, which Congress should pass, viz.: A law providing that when any dairy or food products are transported from one State to another, they should immediately become subject to the laws of the State, irrespective of package or form in which they are done up, the same as the law enacted relative to whiskey, known as the "Wilson Whiskey Bill." This, I believe, is no more than a fair proposition, because when a State has fought hard and long, and at a great expense, to provide its citizens with nothing but pure food products, it is an outrage to allow a manufacturer of impure goods in another State to send his wares in original packages and sell them, perhaps fraudulently, to the unsuspecting public.

Hoping you may have time to consider these few suggestions, I remain, Sir,

Most respectfully yours,

(Signed.) CHAS. A. WIETING,
Commissioner of Agriculture.

SAN JOSÉ SCALE.

During the year the nurseries of the State have been examined as required by the statute by the agents in this Department appointed for that purpose and on their report I have issued 487 certificates as required by the statute to as many different nurseries. The nurseries of this State are practically, if not entirely, free from San José scale. I cannot, however, say as much for the orchards.

The money at my disposal for the work ($10,000) is so small in comparison to the amount of work to be done that I could hardly do more than examine the nurseries as required by the statute. For instance: Dividing the money pro rata among the nurseries I would have about $20 to spend in the work of examining each nursery. Many of these contain acres of land and thousands of trees, to say nothing about the necessary expenditures of money for printed matter, circulars, traveling expenses, etc., in connection with the work, so that after the work of examining the nurseries is done it is hardly possible, under the circumstances, to give attention to the orchards of the State or other trees that may be infected by any of the diseases named in the statute.

The special reports of the agents, which are submitted as a part of the appendix, will show in detail the work performed by each. Some criticisms have been offered because I was unable to reach the orchards, but I am of the opinion that the above statement of facts is sufficient reason for not having done so.

"BOB VEAL."

The agents of this Department doing work under what is known as the "bob veal" law have been busy during the year and have suppressed the sale of "bob veal" to the extent that it is no longer an open business. Such dealing in this commodity as does exist is clandestine and is carefully covered or concealed by shipping in boxes or barrels, or by shipping at such times and places as the shipper believes will escape detection. We have during the year seized and caused to be destroyed 162 calves under four weeks of age that were being exposed for sale or shipped for consumption as food in the State of New York. As one of the instances that would tend to evidence the correctness of the above statements, a superintendent of an express company in conversation with me relative to the shipment of veal over that road stated, that the up country agents complained that since the enforcement of this law the calves were so heavy that it required two men to handle them. Among the perplexing ques-

tions that arise relative to this commodity is the question of the right of a dealer in calves in this State to kill and ship for consumption into another State calves under four weeks of age. I have informed such as have made this inquiry that the law provided they should not sell, offer or expose for sale within the State of New York, for consumption, calves killed under four weeks of age, and I know of no reason why I should draw a distinguishing line between the calves so killed to be sold in other States and calves so killed to be sold for consumption in this State.

BEES.

Sections 80 and 81 provide against the keeping of bees suffering with the disease known as "foul brood," and provides that the Commissioner of Agriculture shall enforce the statute regarding the same. Under the provisions of section 81 I appointed two agents from the civil service eligible list to look after this work in the State. Their reports to this office show that they commenced work in the early part of August and found that the disease existed mostly in Montgomery, Schoharie, Schenectady, Albany and Otsego counties; that the probability is very strong in favor of the fact that the disease was started about four years ago from bees that were brought from the south to Sloansville, Schoharie county, N. Y.; that since that time the disease has spread with Sloansville for its center about thirty miles south and west and twenty miles east and north. The work was done by two agents, viz.: Mr. Mortimer Stevens of Pennellville, N. Y., and Mr. N. D. West of Middleburgh, N. Y. Mr. Stevens devoted his time largely in looking after the western part of the State, where he did not find foul brood to exist. Mr. West did his work in the eastern part and found foul brood to exist, as above stated. His reports show that in July he examined 1,084 swarms and found 491 diseased; in August he examined 1,286 swarms and found 730 diseased; in September he examined 4,724 swarms and found 319 diseased; in

October he examined 894 swarms and found 64 diseased; in all in the four months he examined 7,988 swarms and found 1,604 diseased, i. e., one swarm in five or 20 per cent. of the broods examined were diseased. Of course, these figures do not cover all that there is relative to diseased bees. It simply indicates the number of diseased apiaries and the swarms examined at the time the examination was done. I am reliably informed that there are many bee keepers who had nearly all they were worth invested in bees and lost all, the entire colony dying before the enactment of this law or before Mr. West went to work. I am told that one man, who had 300 swarms, lost 280 in a short period of time. I only speak of this instance to call your attention to the fact that this disease is a terrible scourge to a great industry in this State, and if it is not handled successfully will ultimately ruin the industry of bee keeping.

Thus far this season since this Department began operations under the law above referred to, we have reason to believe that we have stopped the progress of the disease and hope to be able next season to so instruct and enlighten the bee keepers that with their efforts we may be able to wipe the disease entirely out of the State.

LINSEED OIL.

An examination of linseed oil being sold or offered for sale in the State of New York during the past year discloses the fact that nearly all of it is pure. There have been but few cases of such oil being exposed for sale that were in violation of the statute. In these cases the defendants were apparently ignorant of the fact. We have notified them and all dealers of the law and warned them to be careful in their future purchases; that after they have once been warned of the law violations would be followed by action for penalty. Up to date we have tried no actions for violation of this statute, as the violations have been few and trivial.

BEET SUGAR INDUSTRY.

As a part of the output of the beet sugar factories of this State was in the year 1898, I deem it well to give at this time the product, etc., of both factories in this State, for the season of 1898-1899.

The amount of sugar made by the Binghamton Beet Sugar Company at their factory, Binghamton, N. Y., was 1,484,040 pounds, and that made at the First New York Beet Sugar Company's factory, Rome, N. Y., was 1,303,065 pounds. Under the provisions of chapter 500 of the Laws of 1897, there was apportioned to the Binghamton Beet Sugar Company, $14,840.40, and to the First New York Beet Sugar Company, $13,030.65 from the funds appropriated for that purpose.

Dr. E. J. Wheeler, chemist, makes the following statement and report as to polarization, etc., on the sugar made by the respective factories, as follows:

Seventy-eight samples have been received from the First New York Beet Sugar Factory, at Rome, N. Y., and 77 samples from the Binghamton Beet Sugar Factory, located at Binghamton, N. Y. Of these, 51 samples from the Rome factory were granulated, and 27 were brown sugar. From the Binghamton factory, 59 were granulated, and 18 were brown sugar.

In the first tables of this report are noted the data as furnished by the label accompanying the sample. All of the samples received from the Rome factory, with two exceptions, were signed by C. O. Zimmerman; all of those from Binghamton, by F. F. Wright.

In the second tables are given the dates on which the samples were received at this laboratory, the dates on which report was sent, how report was sent, to whom directed, and the polarization.

The only determination made was that of total sugar by the polariscope. The determinations were made with a Schmidt & Haensch triple field polariscope. All readings were made in a 200 m. m. tube, using 26.048 grms. of sugar and 2 c. c. of alumnia cream for clarifying the solutions of granulated sugars, and both 2 c. c. of lead-sub-acetate, and 2 c. c. of alumnia cream for clarifying the solutions of brown sugars.

FIRST NEW YORK BEET SUGAR COMPANY, ROME, N. Y.

SAMPLE GRANULATED SUGAR.

SAMPLE.	Date on label.	SAMPLE TAKEN FROM		FROM RUN OF	
		Sacks.	Barrels.	Sacks.	Barrels.
	1898.				
No. 1	Oct. 20	4	.....	37	.....
No. 2	Oct. 21	5	.....	46	.....
No. 3	Oct. 22	10	.....	130	.....
No. 4	Oct. 26	12	.....	126	.....
No. 5	Oct. 27	11	.....	118	.....
No. 6	Oct. 28	12	.....	124	.....
No. 7	Oct. 29	.....	15	.....	46
No. 8	Oct. 30	.....	19	.....	58
No. 9	Nov. 1	.....	11	.....	34
No. 10	Nov. 2	.....	18	.....	55
No. 11	Nov. 3	13	.....	135	.....
No. 12	Nov. 4	15	.....	150	.....
No. 13	Nov. 5	17	.....	169	.....
No. 14	Nov. 7	11	16	108	47
No. 15	Nov. 8	.....	17	.....	57
No. 16	Nov. 9	.....	19	.....	57
No. 17	Nov. 10	4	15	40	44
No. 18	Nov. 11	21	.....	215	.....
No. 19	Nov. 12	16	.....	165	.....
No. 20	Nov. 14	23	.....	234	.....
No. 21	Nov. 15	.....	21	.....	64
No. 22	Nov. 15	.....	21	.....	63
No. 23	Nov. 17	.....	21	.....	64
No. 24	Nov. 18	.....	15	.....	46
No. 25	Nov. 19	.....	21	.....	63
No. 26	Nov. 21	14	12	144	37
No. 27	Nov. 22	.....	20	.....	61
No. 28	Nov. 23	.....	19	.....	56
No. 29	Nov. 24	.....	18	.....	53
No. 30	Nov. 25	.....	19	.....	55
No. 31	Nov. 26	.....	15	.....	45
No. 32	Nov. 28	.....	22	.....	67
No. 33	Nov. 29	.....	24	.....	72
No. 34	Nov. 30	12	6	36	17
No. 35	Dec. 1	.....	13	.....	39
No 36	Dec. 2	.....	21	.....	62
No. 37	Dec. 3	.....	21	.....	62
No. 38	Dec. 5	.....	16	.....	48
No. 39	Dec. 6	.....	13	.....	38
No. 40	Dec. 7	.....	11	.....	34
No. 41		.....	11	.....	34
No. 42	Dec. 9	.....	10	.....	30
No. 44	Dec. 10	.....	15	.....	45
No. 46	Dec. 12	.....	9	.....	25
No. 48	Dec. 13	.....	8	.....	25
No. 51	Dec. 15	.....	10	.....	30
No. 53	Dec. 16	.....	10	.....	30

SAMPLE GRANULATED SUGAR — (*Concluded*).

SAMPLE.	Date on label.	SAMPLE TAKEN FROM		FROM RUN OF	
		Sacks	Barrels	Sacks.	Barrels.
	1898.				
No. 54	Dec. 17	.....	7	.....	20
No. 55	Dec. 19	.....	8	.....	25
No. 56	Dec. 20	.....	10	.....	30
No. 57	Dec. 21	.....	9	.....	26
		200	586	1,957	1,774

BROWN SUGAR.

	1898.				
No. 43	Dec. 9	.....	20	.....	200
No. 45	Dec. 10	20	.....	200	.....
No. 47	Dec. 13	20	.....	200	.....
Special	Dec. 12	13	.....	135	.....
No. 50	Dec. 14	10	.....	100	.....
No. 52	Dec. 15	10	.....	100	.....
No. 58	Dec. 22	20	.....	200	.....
No. 60	Dec. 24	15	.....	151	.....
No. 61	Dec. 28	10	.....	100	.....
No. 62	Dec. 29	10	.....	100	.....
No. 63	Dec. 30	15	.....	150	.....
No. 64	Dec. 31	21	.....	215	.....
	1899.				
No. 65	Jan. 3	.....	10	.....	30
No. 66	Jan. 4	.....	23	.....	70
No. 67	Jan. 5	.....	33	.....	100
	1899.				
No. 68	Jan. 10	12	.....	125	.....
No. 69	Jan. 10	22	.....	225	.....
No. 70	Jan. 11	22	13	225	39
No. 71	Jan. 12	15	.....	150	.....
No. 72	Jan. 13	.....	34	.....	102
No. 73	Jan. 14	13	3	130	9
No. 74	March 29	.....	20	.....	60
No. 75	March 30	.....	20	.....	60
No. 76	March 31	.....	20	.....	60
No. 77	April 1	.....	20	.....	60
No. 78	April 3	.....	20	.....	60
No. 79	April 4	.....	20	.....	60
		248	283	2,506	910

FIRST NEW YORK BEET SUGAR COMPANY, ROME, N. Y.— (*Continued.*)

POLARIZATION GRANULATED SUGAR.

SAMPLE.	Date received.	Report sent.	Sent by.	Addressed to	Polarization.
	1898.	1898.			
No. 1	Oct. 21	Oct. 28	Mail	Zimmerman	99.6
No. 2	Oct. 22	Oct. 28	Mail	Zimmerman	99.6
No. 3	Oct. 24	Oct. 28	Mail	Zimmerman	99.6
No. 4	Oct. 27	Oct. 28	Mail	Zimmerman	99.7
No. 5	Oct. 28	Oct. 29	Mail	Zimmerman	99.7
No. 6	Oct. 29	Oct. 29	Mail	Zimmerman	99.7
No. 7	Oct. 31	Nov. 2	Mail	Zimmerman	99.7
No. 8	Nov. 1	Nov. 2	Mail	Zimmerman	99.7
No. 9	Nov. 2	Nov. 2	Mail	Zimmerman	99.7
No. 10	Nov. 3	Nov. 4	Mail	Zimmerman	99.7
No. 11	Nov. 4	Nov. 4	Mail	Zimmerman	99.7
No. 12	Nov. 5	Nov. 5	Mail	Zimmerman	99.7
No. 13	Nov. 7	Nov. 8	Mail	Zimmerman	99.7
No. 14	Nov. 8	Nov. 8	Mail	Zimmerman	99.7
No. 15	Nov. 9	Nov. 11	Wire	Zimmerman	99.7
No. 16	Nov. 10	Nov. 11	Wire	Zimmerman	99.7
No. 17	Nov. 11	Nov. 11	Wire	Zimmerman	99.7
No. 18	Nov. 12	Nov. 14	Wire	Zimmerman	99.7
No. 19	Nov. 14	Nov. 14	Wire	Zimmerman	99.7
No. 20	Nov. 15	Nov. 16	Wire	Zimmerman	99.7
No. 21	Nov. 16	Nov. 16	Wire	Zimmerman	99.7
No. 22	Nov. 17	Nov. 18	Wire	Zimmerman	99.7
No. 23	Nov. 18	Nov. 18	Wire	Zimmerman	99.7
No. 24	Nov. 19	Nov. 19	Wire	Zimmerman	99.7
No. 25	Nov. 21	Nov. 22	Wire	Zimmerman	99.7
No. 26	Nov. 22	Nov. 22	Wire	Zimmerman	99.7
No. 27	Nov. 23	Nov. 23	Mail	Zimmerman	99.6
No. 28	Nov. 24	Nov. 26	Wire	Zimmerman	99.7
No. 29	Nov. 25	Nov. 26	Wire	Zimmerman	99.7
No. 30	Nov. 26	Nov. 26	Wire	Zimmerman	99.7
No. 31	Nov. 28	Nov. 28	Wire	Zimmerman	99.7
No. 32	Nov. 29	Nov. 30	Wire	Zimmerman	99.7
No. 33	Nov. 30	Nov. 30	Wire	Zimmerman	99.7
No. 34	Dec. 1	Dec. 2	Wire	Zimmerman	99.7
No. 35	Dec. 2	Dec. 2	Wire	Zimmerman	99.7
No. 36	Dec. 3	Dec. 3	Wire	Zimmerman	99.7
No. 37	Dec. 5	Dec. 8	Wire	Zimmerman	99.7
No. 38	Dec. 6	Dec. 8	Wire	Zimmerman	99.7
No. 39	Dec. 8	Dec. 8	Wire	Zimmerman	99.7
No. 40	Dec. 8	Dec. 8	Wire	Zimmerman	99.7
No. 41	Dec. 9	Dec. 12	Wire	Zimmerman	99.7
No. 42	Dec. 10	Dec. 12	Wire	Zimmerman	99.7
No. 44	Dec. 12	Dec. 13	Wire	Zimmerman	99.7
No. 46	Dec. 13	Dec. 13	Wire	Zimmerman	99.7
No. 48	Dec. 14	Dec. 14	Wire	Zimmerman	99.7
No. 51	Dec. 16	Dec. 17	Wire	Zimmerman	99.7
No. 53	Dec. 17	Dec. 17	Wire	Zimmerman	99.7
No. 54	Dec. 19	Dec. 20	Wire	Zimmerman	99.7
No. 55	Dec. 20	Dec. 20	Wire	Zimmerman	99.7

POLARIZATION GRANULATED SUGAR — (*Concluded*).

SAMPLE.	Date received.	Report sent.	Sent by.	Addressed to.	Polarization
	1898.	1898.			
No. 56	Dec. 22	Dec 29	Wire...	Zimmerman....	99.7
No. 57	Dec. 23	Dec. 29	Wire...	Zimmerman....	99.7
	BROWN SUGAR.				
	1898.	1898.			
No. 43	Dec. 10	Dec. 12	Wire...	Zimmerman....	92.6
No. 45	Dec. 12	Dec. 13	Wire...	Zimmerman	90.8
Special	Dec. 13	Dec. 13	Wire...	Zimmerman....	91.8
No. 47	Dec. 14	Dec. 14	Wire...	Zimmerman...	91.0
No. 50	Dec. 15	Dec. 17	Wire...	Zimmermen	92.6
No. 52	Dec. 16	Dec. 17	Wire...	Zimmerman....	92.4
No. 58	Dec. 27	Dec. 29	Wire...	Zimmerman.. .	91.5
No. 60	Dec. 27	Dec. 29	Wire...	Zimmermad	91.5
No. 61	Dec. 29	Dec. 29	Wire...	Zimmerman....	91.5
No. 62	Dec. 30	Dec. 31	Wire...	Zimmerman....	91.5
No 63	Dec. 31	Dec. 31	Wire...	Zimmerman....	91.5
	1899.	1899.			
No 64	Jan. 2	Jan. 4	Wire...	Zimmerman...	93.0
No. 65	Jan. 4	Jan. 4	Wire...	Zimmerman....	94.3
No. 66	Jan. 5	Jan. 7	Wire...	Zimmerman....	94.5
No. 67	Jan. 6	Jan. 7	Wire...	Zimmerman	93.9
No. 68	Jan. 9	Jan. 12	Wire...	Spitzli.....	95.0
No. 69	Jan. 11	Jan. 12	Wire...	Spitzli.....	94.2
No. 70	Jan. 12	Jan. 12	Wire...	Spitzli.....	94.2
No. 71	Jan. 18	Jan. 14	Wire...	Spitzli.....	94.8
No 72	Jan. 14	Jan. 14	Wire...	Spitzli.....	93.2
No, 73	Jan. 17	Jan. 20	Wire...	Spitzli.....	92.5
No. 74	March 30	March 30	Wire...	Factory.....	92.2
No. 75	March 31	March 31	Wire...	Factory.....	92.8
No. 76	April 1	April 1	Wire...	Factory.....	93.6
No. 77	April 3	April 3	Wire...	Factory.....	93.4
No. 78	April 4	April 4	Wire...	Factory.....	92.4
No. 79	April 5	April 5	Wire...	Factory.....	91.2

BINGHAMTON BEET SUGAR COMPANY, BINGHAMTON, N. Y.

SAMPLE GRANULATED SUGAR.

SAMPLE.	Date on label.	SAMPLE TAKEN FROM		FROM RUN OF	
		Sacks.	Barrels.	Sacks.	Barrels.
	1891.				
	Oct. 26	*56	.....	.....	.....
	Oct. 27	51	.....	....	.....
	Oct. 28	49	.....	....	.....
	Oct. 29	153	.....	.....	.....
No. 5	Oct. 30 & 31	.....	.....	.....	.....
No. 6	Oct. 31	.....	.....	.....	.....
No. 7	Nov. 2	.....	.....	.....	.....

* All sacks are 100 pounds each.

SAMPLE GRANULATED SUGAR — (*Concluded*).

SAMPLE.	Date on label.	SAMPLE TAKEN FROM		FROM RUN OF	
		Sacks.	Barrels.	Sacks.	Barrels.
	1891.				
No. 8	Nov. 3	.....	.....	.....	.....
No. 9	Nov. 4	.....	.....	.....	.....
No. 10	Nov. 5	.....	.....	.....	.....
No. 11	Nov. 6	.....	.....	.....	.....
No. 12	Nov. 7	.....	.....	.....	.....
No. 13	Nov. 8	.....	.....	.....	.....
No. 14	Nov. 9	.....	.....	.....	.....
No. 15	Nov. 10	.....	.....	.....	.....
No. 16	Nov. 11	.....	.....	.....	.....
No. 17	Nov. 12	.....	.....	.....	.....
No. 18	Nov. 13	.....	.....	.....	.....
No. 19	Nov. 14	.....	.....	.....	.....
No. 20	Nov. 15	.....	.....	.....	.....
No. 21	Nov. 16	.....	.....	.....	.....
No. 22	Nov. 17	.....	.....	.....	.....
No. 23	Nov. 18	.....	.....	.....	.....
No. 24	Nov. 19	.....	.....	.....	.....
No. 25	Nov. 20	.....	.....	.....	.....
No. 26	Nov. 21	.....	.....	.....	.....
No. 27	Nov. 22	.....	.....	.....	.....
No. 29	Nov. 24	.....	.....	.....	.....
No 30	Nov. 25	.....	.....	.....	.....
No. 28	Nov. 23	.....	.....	.....	.....
No. 31	Nov. 26	.....	.....	.....	.....
No. 32	Nov. 27	.....	.....	.....	.....
Sample 33	Nov. 28	100	.....	100	.....
No. 34	Nov. 29	196	.....	196	.....
No. 35	Nov. 30	301	.....	301	.....
No. 36	Dec. 1	208	.....	208	.....
No. 37	Dec. 2	193	.....	193	.....
No. b38	Dec. 3	.....	65	.....	65
No 39	Dec. 4	.....	33	.....	33
No. 40	Dec. 5	.....	62	.....	62
No. 41	Dec. 6	213	.....	213	.....
No. 42	Dec. 7	209	.....	209	.....
No. 43	Dec. 8	220	.....	220	.....
No. 44	Dec. 9	200	.....	200	.....
No. 45	Dec. 10	199	.....	199	.....
No. 46	Dec. 11	242	.....	242	.....
No. 47	Dec. 13	.....	30	.....	30
No. 48	Dec. 14	.....	64	.....	64
No. 49	Dec. 15	.....	62	.....	62
No 50	Dec. 16	.....	73	.....	73
No. 51	Dec. 17	95	87	95	87
No. 52	Dec. 21	.....	85	.....	85
No. 53	Dec. 22	50	49	50	49
No. 54	Dec. 23	58	44	58	44
No. 55	Dec. 24	96	26	96	26
No. 56	Dec. 27	.....	35	.....	35
No. 57	Dec. 28	.....	27	.....	27
No. 58	Dec. 29	.....	52	.....	52
No. 59	Dec. 30	.....	35	.....	35
		2,889	829	2,889	829

BROWN SUGAR.

SAMPLE.	Date on label.	SAMPLE TAKEN FROM		FROM RUN OF	
		Sacks.	Barrels.	Sacks.	Barrels.
	1899.				
No. 1	March 9	125	.....	125	.....
No. 2	March 10	125	.....	125	.....
No. 3	March 11	125	.....	125	.....
No. 4	March 13	125	.....	125	.....
No. 5	March 14	200	.....	200	.....
No. 6	March 15	200	.....	200	.....
No. 7	March 16	200	.....	200	.....
No. 8	March 20	200	.....	200	.....
No. 9	March 21	200	.....	200	.....
No. 10	March 22	200	.....	200	.....
No. 11	March 23	200	.....	200	.....
No. 12	March 24	200	.....	200	.....
No. 13	March 25	200	.....	200	.....
No. 14	March 27	200	.....	200	.....
No. 15	March 28	200	.....	200	.....
No. 16	March 29	300	.....	300	.....
No. 17	March 30	300	.....	300	.....
No. 18	March 31	364	.....	364	.....
		3,564	.....	3,564	.....

BINGHAMTON BEET SUGAR COMPANY, BINGHAMTON, N. Y.

POLARIZATION GRANULATED SUGAR.

SAMPLE.	Date received.	Report sent.	Sent by.	Addressed to.	Polarization.
	1898.	1898.			
.....	Oct. 29	Oct. 29	Mail ...	Factory	99.6
.....	Oct. 29	Oct. 29	Mail ...	Factory	99.6
.....	Oct. 29	Oct. 29	Mail ...	Factory	99.7
.....	Nov. 1	Nov. 2	Wire...	Factory	99.7
No. 5	Nov. 1	Nov. 2	Wire...	Factory	99.5
No. 6	Nov. 2	Nov. 2	Wire...	Factory	99.7
No. 7	Nov. 3	Nov. 4	Mail ...	Factory	99.6
No. 8	Nov. 4	Nov. 4	Mail ...	Factory	99.6
No. 9	Nov. 5	Nov. 5	Mail ...	Factory	99.6
No. 10	Nov. 7	Nov. 8	Wire...	Factory	99.6
No. 11	Nov. 7	Nov. 8	Wire...	Factory	99.6
No. 12	Nov. 8	Nov. 8	Wire...	Factory	99.6
No. 13	Nov. 10	Nov. 11	Wire...	Factory	99.6
No. 14	Nov. 11	Nov. 11	Wire...	Factory	99.6
No. 15	Nov. 15	Nov. 16	Wire...	Factory	99.6
No. 16	Nov. 15	Nov. 16	Wire...	Factory	99.6
No. 17	Nov. 15	Nov. 16	Wire...	Factory	99.6
No. 18	Nov. 16	Nov. 16	Wire...	Factory	99.6
No. 19	Nov. 17	Nov. 18	Wire...	Factory	99.6
No. 20	Nov. 17	Nov. 18	Wire...	Factory	99.6

POLARIZATION GRANULATED SUGAR — (*Concluded*).

SAMPLE.	Date received.	Report sent.	Sent by.	Addressed to.	Polarization.
	1898	1898.			
No. 21	Nov. 19	Nov. 19	Wire...	Factory	99.6
No. 22	Nov. 19	Nov. 19	Wire...	Factory	99.6
No. 23	Nov. 23	Nov. 23	Wire...	Factory	99.6
No. 24	Nov. 23	Nov. 23	Wire...	Factory	99.7
No. 25	Nov. 23	Nov. 23	Wire...	Factory	99.7
No. 26	Nov. 23	Nov. 23	Wire...	Factory	99.7
No. 27	Nov. 28	Nov. 28	Wire...	Factory	99.6
No. 29	Nov. 28	Nov. 28	Wire...	Factory	99.6
No. 30	Nov. 28	Nov. 28	Wire...	Factory	99 6
No. 28	Dec. 2	Dec. 2	Wire...	Factory	99.6
No. 31	Dec. 2	Dec. 2	Wire..	Factory	99.6
No. 32	Dec. 2	Dec. 2	Wire...	Factory	99.6
No. 33	Dec. 2	Dec. 2	Wire...	Factory	99.6
No. 34	Dec. 2	Dec. 2	Wire...	Factory	99.6
No. 35	Dec. 2	Dec. 2	Wire...	Factory	99.6
No. 36	Dec. 8	Dec. 8	Wire...	Factory	99.6
No. 37	Dec. 8	Dec. 8	Wire...	Factory	99.6
No. 38	Dec. 8	Dec. 8	Wire...	Factory	99.6
No. 39	Dec. 8	Dec. 8	Wire...	Factory	99.6
No. 40	Dec. 8	Dec. 8	Wire...	Factory	99 6
No. 41	Dec. 8	Dec. 8	Wire...	Factory	99.6
No. 42	Dec. 14	Dec. 14	Wire...	Factory	99.7
No. 43	Dec. 14	Dec. 14	Wire...	Factory	99.7
No. 44	Dec. 14	Dec. 14	Wire...	Factory	99.6
No. 45	Dec. 14	Dec. 14	Wire...	Factory	99.7
No. 46	Dec. 14	Dec. 14	Wire...	Factory	99.7
No. 47	Dec. 20	Dec. 20	Wire...	Factory	99.7
No. 48	Dec. 20	Dec. 20	Wire...	Factory	99.7
No. 49	Dec. 20	Dec. 20	Wire...	Factory	99.7
No. 50	Dec. 20	Dec. 20	Wire...	Factory	99.7
No. 51	Dec. 20	Dec. 20	Wire...	Factory	99.7
No. 52	Dec. 20	Dec. 29	Wire...	Factory	99.8
No. 53	Dec. 29	Dec. 29	Wire...	Factory	99.8
No. 54	Dec. 29	Dec. 29	Wire...	Factory	99.8
No. 55	Dec. 29	Dec. 29	Wire...	Factory	99.8
	1899.	1899.			
No. 56	Jan. 3	Jan. 4	Wire...	Factory	99.7
No. 57	Jan. 3	Jan. 4	Wire...	Factory	99.7
No. 58	Jan. 3	Jan. 4	Wire...	Factory	99 7
No. 59	Jan. 3	Jan. 4	Wire...	Factory	99.7

POLARIZATION BROWN SUGAR.

	1899.	1899.			
No. 1	March 15	March 15	Wire...	Factory	93.3
No. 2	March 15	March 15	Wire...	Factory	93.8
No. 3	March 15	March 15	Wire...	Factory	92.3
No. 4	March 24	March 24	Wire...	Factory	93.4
No. 5	March 24	March 24	Wire...	Factory	93.1
No. 6	March 24	March 24	Wire...	Factory	93.4
No. 7	March 24	March 24	Wire...	Factory	93.1
No. 8	March 30	March 30	Wire...	Factory	94.4
No. 9	March 30	March 30	Wire...	Factory	94.4
No. 10	March 30	March 30	Wire...	Factory	94.4

POLARIZATION BROWN SUGAR — (*Concluded*).

SAMPLE.	Date received.	Report sent.	Sent by.	Addressed to.	Polarization.
	1899.	1899.			
No. 11	March 30	March 30	Wire...	Factory	95.1
No. 12	March 30	March 30	Wire...	Factory	94.4
No. 13	April 6	April 6	Wire...	Factory	92.9
No. 14	April 6	April 6	Wire...	Factory	92.9
No. 15	April 6	April 6	Wire...	Factory	92.2
No. 16	April 6	April 6	Wire...	Factory	92.0
No. 17	April 6	April 6	Wire...	Factory	93.2
No. 18	April 6	April 6	Wire...	Factory	93.2

In my last annual report I stated that it had been settled beyond question of doubt that sugar beets could be successfully and profitably raised on New York soil. Experience the past season but emphasizes this statement. For that reason I discontinued the experimental plats conducted by the Department in 1897 and 1898 and gave my whole attention to instructing beet growers in the proper way of raising and cultivating the crop. During the year State instructors were sent among farmers growing beets for the factories manufacturing sugar at Binghamton and Rome, and letters received at the Department and the reports of instructors attest the beneficial results to the farmers and their appreciation of the encouragement given by the State. It has been the means of making farmers better acquainted with our Department and its purposes, and I feel sure that with two or three years more of education along this line the industry will be firmly established in New York. At present the industry has not reached that point in its development where State aid could be safely withdrawn and the industry left to work out its own salvation. The encouragement so generously given by the State, and so highly appreciated by the beet growers, should necessarily be continued.

The season of 1899, with its long drought, proved a very unfavorable one for sugar beets generally, and materially shortened the crops. A rough estimate places the crop at 25 per cent. less than what it would have been had favorable weather prevailed.

The Binghamton factory had contracts with 730 farmers this year, from whom they received 12,800 tons of beets for conver-

sion into sugar. They manufactured and sold, according to reports on file in this Department, 2,289,000 pounds of sugar, receiving from the State, under the law, the sum of $22,890.

The Rome factory received this year 9,510 tons of beets, the net quantity after the State weighman had made dockages for adhering soil, etc., from which 1,245,565 pounds of sugar was made, and received from the State $12,455.65. They made contracts with 710 farmers, 651 of whom made delivery of beets, 59 failing to ship any at all. A part of these 59 were growers that contracted for small plats and changed their minds about raising the beets, and did not sow the seed. Others reported that the seed did not come up well and their plants were so scattered that they plowed them up. Others still reported that the dry weather interfered with their crop to such extent that the beets were too small to ship to the factory.

To the dry weather of the past summer is attributed an average shrinkage of from 20 to 30 per cent. in their tonnage. Otherwise the net tonnage would have been between 12,000 and 13,000 tons, if the season had been an average one as to quantity of rainfall through the summer and early fall months. Last year the average content in the beets was 11.62, and so far this year 12.54; .92 higher average sugar content than last year.

The factories find no trouble in disposing of the finished product at a profitable price, and the quality of New York sugar made from sugar beets grown in this State ranks with the finest quality of cane sugar.

Difference of opinion arose between the factories and the beet growers as to whether the intent of the law was that $5 per ton should be paid for beets at the factory or the place of shipment. The law was amended by the last Legislature apparently to the satisfaction of all parties concerned, by allowing the place to be agreed on by the beet grower and factory.

A composite sample of sugar manufactured each day this season at the two factories in operation in this State was sent to Chemist Wheeler of the Department for analysis, to ascertain if crystallization reached the quality designated by section 72 of chapter 500

of the Laws of 1897, which says that no money shall be distributed to such manufacturers unless the sugar manufactured by them shall contain at least 90 per cent. crystalized sugar. The results of the analyses were as follows:

NUMBER OF SACKS OR BARRELS OF SUGAR, TOGETHER WITH POLARIZATION.

THE BINGHAMTON BEET SUGAR COMPANY.

Date.	Number of sacks or barrels.	Polarization.
1899.		
October 12.....	200 sacks	94.4
October 13.....	150 sacks	94.
October 14.....	150 sacks	94.2
October 16.....	100 sacks	95.4
October 17.....	250 sacks	94.8
October 18.....	150 sacks	95.5
October 19.....	200 sacks	96.5
October 20.....	200 sacks	96.7
October 23.....	200 sacks	94.8
October 25.....	200 sacks	96.2
October 26.....	200 sacks	95.8
October 27.....	200 sacks	97.
October 28.....	200 sacks	96.4
October 30.....	200 sacks	96.8
October 31.....	200 sacks	97.
November 1.....	200 sacks	96.7
November 2.....	200 sacks	96.7
November 3.....	200 sacks	96.8
November 6.....	200 sacks	96.
November 7.....	200 sacks	96.3
November 8.....	200 sacks	95.6
November 9.....	200 sacks	95.8
November 10.....	200 sacks	96.6
November 13.....	200 sacks	95.6
November 16.....	200 sacks	93.3
November 17.....	200 sacks	95.8
November 18.....	200 sacks	96.
November 21.....	200 sacks	95.2
November 22.....	200 sacks	95.
November 23.....	200 sacks	94.4
November 23.....	200 sacks	90.6
November 24.....	200 sacks	94.6

THE BINGHAMTON BEET SUGAR COMPANY — (*Concluded*).

Date.	Number of sacks or barrels.	Polarization.
1899.		
November 25.....	200 sacks	94.
November 27.....	200 sacks	95.
November 28.....	200 sacks	94.4
November 30.....	200 sacks	95.5
December 1.....	200 sacks	95.2
December 2.....	200 sacks	95.
December 4.....	200 sacks	95.2
December 5.....	200 sacks	95.2
December 6.....	200 sacks	94.5
December 7.....	200 sacks	95.5
December 7.....	200 sacks	91.6
December 8.....	200 sacks	95.5
December 9.....	200 sacks	90.2
December 11.....	200 sacks	95.2
December 12.....	200 sacks	94.
December 12.....	200 sacks	91.2
December 13.....	200 sacks	94.
December 14.....	200 sacks	94.
December 15.....	200 sacks	90.7
December 16.....	200 sacks	94.
December 19.....	173 sacks	93.8
December 19.....	88 sacks	90.3
1900.		
March 1.....	200 sacks	92.8
March 2.....	200 sacks	90.5
March 3.....	200 sacks	93.8
March 5.....	184 sacks	92.5

FIRST NEW YORK BEET SUGAR COMPANY.

Date.	Number of sacks or barrels.	Polarization.
1899.		
October 9.....	115 sacks	99.4
October 10.....	111 sacks	99.4
October 11.....	65 sacks, 22 barrels	99.4
October 12.....	54 sacks, 8 barrels	99.4
October 13.....	47 sacks, 12 barrels	99.4
October 16.....	8 sacks, 27 barrels	99.4
October 17.....	47 barrels	99.4
October 18.....	37 sacks, 25 barrels	99.7
October 19.....	80 sacks, 26 barrels	99.7

FIRST NEW YORK BEET SUGAR COMPANY—(*Continued*).

Date.	Number of sacks or barrels.	Polarization.
1899.		
October 20.....	125 sacks, 30 barrels	99.7
October 21.....	24 barrels	99.7
October 23.....	39 sacks	99.
October 24.....	81 sacks, 16 barrels	99.7
October 26.....	125 sacks, 21 barrels	99.7
October 27.....	26 barrels	99.8
October 28.....	16 sacks, 29 barrels	99.8
October 30.....	100 sacks, 30 barrels	99.8
October 31.....	30 barrels	99.7
November 1.....	65 sacks, 14 barrels	99.7
November 2.....	50 barrels	99.7
November 3.....	35 barrels	99.7
November 3.....	2 sacks	97.8
November 4.....	125 sacks	99.7
November 6.....	128 sacks	99.7
November 8.....	105 sacks	99.7
November 9.....	50 sacks, 25 barrels	99.7
November 10.....	35 barrels	99.7
November 13.....	50 barrels	99.7
November 14.....	62 sacks, 4 barrels	99.7
November 15.....	38 sacks, 51 barrels	99.7
November 16.....	50 sacks, 20 barrels	99.7
November 18.....	50 barrels	99.7
November 18.....	62 barrels	99.7
November 20.....	210 sacks	99.7
November 22.....	84 sacks	99.7
November 22.....	64 sacks	99.7
November 23.....	50 barrels	99.7
November 24.....	88 sacks, 15 barrels	99.7
November 25.....	31 barrels	99.7
November 27.....	39 barrels	99.7
December 1.....	59 sacks	99.7
December 2.....	29 barrels	99.7
December 5.....	66 sacks, 137 barrels	99.7
December 6.....	36 barrels	99.7
December 7.....	80 sacks, 16 barrels	99.7
December 8.....	180 sacks, 35 barrels	99.7
December 9.....	50 barrels	99.5
December 11.....	2 sacks, 17 barrels	99.6

FIRST NEW YORK BEET SUGAR COMPANY — (*Continued*).

Date.	Number of sacks or barrels.	Polarization.
1899.		
December 12.....	36 barrels	99.4
December 14.....	53 sacks	99.7
December 15.....	60 sacks, 25 barrels	99.7
December 16.....	18 barrels	99.7
December 19.....	100 sacks	90.3
December 20.....	100 sacks	91.
December 21.....	100 sacks	91.
December 22.....	100 sacks	90.5
December 23.....	150 sacks	92.3
December 25.....	125 sacks	99.4
December 25.....	250 sacks	91.1
December 26.....	80 sacks, 42 barrels	99.4
December 27.....	62 sacks	91.8
December 27.....	48 barrels	99.6
December 28.....	53 barrels	99.4
December 29.....	48 barrels	99.4
December 30.....	2 sacks, 65 barrels	99.7
1900.		
January 3.....	18 barrels	99.7
January 4.....	83 sacks	99.7
January 4.....	100 sacks	92.7
January 5.....	150 sacks	92.4
January 5.....	125 sacks	99.4
January 6.....	89 sacks	99.
January 8.....	203 sacks	99.3
January 8.....	100 sacks	92.
January 9.....	18 barrels	99.7
January 10.....	30 barrels	99.7
January 11.....	32 barrels	99.7
January 12.....	50 barrels	99.7
January 13.....	32 barrels	99.5
January 15.....	45 barrels	99.5
January 15.....	100 sacks	90.9
January 16.....	43 barrels	99.7
January 17.....	110 sacks, 8 barrels.....	99.7
January 18.....	115 sacks	99.7
January 20.....	125 sacks	93.6
January 22.....	137 sacks	99.7
January 22.....	175 sacks	92.3

FIRST NEW YORK BEET SUGAR COMPANY — (*Concluded*).

Date.		Number of sacks or barrels.	Polarization.
1900.			
January	24.....	100 sacks	93.4
January	25.....	115 sacks	92.8
January	26.....	101 sacks	93.2
January	27.....	115 sacks	94.6
February	1.....	50 sacks	94.6
February	2.....	65 sacks	91.
February	5.....	115 sacks	94.1
February	5.....	200 sacks	94.1
February	6.....	128 sacks, 19 barrels.....	95.0
February	7.....	40 barrels	94.6
February	8.....	50 sacks	95.7
February	9.....	75 sacks	93.2
February	10.....	53 sacks	95.1
March	30.....	125 sacks	94.3
March	31.....	100 sacks	94.3
April	2.....	100 sacks	93.2
April	3.....	75 sacks	94.3
April	4.....	150 sacks	94.3
April	5.....	175 sacks	94.3

DISEASES OF DOMESTIC ANIMALS.

A mistaken notion prevails among farmers generally that this Department has charge of the ordinary diseases of animals, and frequently letters asking advice as to the treatment and care reach us. Our veterinarians have in nearly all cases submitted replies voluntarily, but it should be borne in mind that our Department has control of only *contagious diseases*, except tuberculosis and glanders, which are looked after by the State Board of Health.

The work along this line is gradually assuming large proportions, due in a great measure to the confidence in our work, evidenced by the hearty co-operation of the farmers, who no longer try to hide diseases among their animals, but rather make it known on first appearance, that their healthy animals and those of their neighbors may be saved from infection. It took long to educate them to the necessities of co-operation in order successfully to combat contagious diseases, but I am now glad to say that with

the help of the farmers and breeders we have been able speedily to suppress outbreaks during the past year.

The diseases which we had to deal with during 1899 were rabies, black quarter, infectious mammitis, verminous bronchitis, swine plague and actinomycosis. Quite an extensive outbreak of rabies occurred at Buffalo which required careful vigilance on the part of the Department and local authorities to check. All dogs in that district were quarantined and inspectors placed there to see that orders and regulations were rigidly enforced. To make sure that the disease was accurately diagnosed, Professor Moore, bacteriologist at the State Veterinary College at Cornell, inoculated several healthy animals with portions of the brain and spinal cords of cows and dogs that died of rabies, and in every case the inoculated animals developed paralytic rabies.

The outbreak of rabies this year can be confined to Erie and Niagara counties, while last year it was confined to Saratoga and Columbia counties. The quarantine in Saratoga and Columbia counties was successful, as there has been no outbreak there this year and we have great confidence that the quarantines in Erie and Niagara counties this year will prove equally as successful.

During the year there has been some difficulty within the State with the disease known as sheep scabies. Much of that difficulty came from animals supposed to have been brought into the State through the Buffalo stock yards. This was evidenced by the fact that many farmers who had bought their stock of sheep out of those yards found that, after a given length of time, their entire flock was infested with the disease. With the money at the command of this Department, I found it was not practical for me to undertake to establish such supervision or surveillance at those yards as would be effectual in stopping this. I, therefore, wrote the authorities at that yard requesting them to establish a sheep dip, and have all sheep dipped coming into or through those yards into the State of New York. The superintendent responded by complying with the request, so that now the sheep coming through those yards are all properly treated and danger from this disease from that source is reduced to the minimum.

At this writing the disease would seem to be under control, as no late cases have been reported from that quarter. The experiment of Professor Moore is of particular value in showing that rabies actually exists.

In every instance where black quarter was found our veterinarians vaccinated the healthy stock with black-leg vaccine and not one case of death was reported as the result of vaccination, nor did it develop the disease in any of the animals. We have not had a favorable opportunity to experiment with a modified form of the Tussant method of dealing with this disease, owing to difficulty of procuring blood at proper time.

The disease known as infectious abortion in cattle has come to my attention in several localities, although no investigation has been made concerning its cause or prevention. It has been reported by a number of cattle owners that this affection was a very serious hindrance to the dairy and cattle-breeding industries. When this trouble begins in a herd, it usually affects nearly all of the cows; the loss of calves frequently being as high as 90 per cent. After the first abortion the cow does not readily conceive again, and if she does, abortion is again liable to follow, after which the animal may recover. However, the loss is so heavy that usually the aborting animals are put into beef, which is a great sacrifice in case of blooded stock or choice dairy cows. The spread of the disease can sometimes be checked by means of thorough disinfection. This trouble is so serious and so widely distributed in the dairy districts that it seems desirable to call special attention to it, and to suggest, on account of its great economic importance to cattle raisers, that a thorough inquiry should be made into its nature and means of prevention.

Of the other diseases mentioned as existing in this State during the past year, there were a few isolated cases which were easily subdued. There have been a number of diseases reported to the Department believed to be contagious in their nature, but further investigation is necessary before I can undertake to make definite statements concerning them.

PARIS GREEN.

Reports made to this office by Dr. Wm. H. Jordan, Director of the Geneva Experiment Station, show that the Paris green analyzed at that station in accordance with the provisions of the statute was as follows:

Name and address of manufacturer.	Name of brand or trademark.	Place where sample was taken.		Per cent. of arsenious oxide.	Station No.
A. B. Ansbacher & Co., New York	Paris Green	Holcomb	Guaranteed Found	Absolutely pure 56.55	1
	Paris Green	Holcomb	Guaranteed Found	——— 56.31	2
Hamden Paint and Chemical Co., Springfield, Mass.	Paris Green	Holcomb	Guaranteed Found	Pure 57.03	3
Devoe & Reynolds, New York	Paris Green	Holcomb	Guaranteed Found	Pure 56.65	4
Soudheim, Aleberg & Co., New York	Paris Green	Canandaigua	Guaranteed Found	Pure 56.16	5
Leggett & Bro., New York	Paris Green	Canandaigua	Guaranteed Found	Pure 56.55	6
P. Becker & Co., Buffalo, N. Y.	Paris Green	Black Creek	Guaranteed Found	Pure 56.15	8
	Paris Green	Black Creek	Guaranteed Found	Strictly pure 56.15	9
Lewis Berger & Sons, New York	Paris Green	Black Creek	Guaranteed Found	Pure 58.15	10
C. T. Raynolds & Co., New York	Paris Green	Angelica	Guaranteed Found	Strictly pure 56.15	11
Adler Color and Chemical Works, New York	Paris Green	Angelica	Guaranteed Found	——— ——— 55.34	12
Sisson & Smalley (jobbers), Cuba, N. Y.	Paris Green	Friendship	Guaranteed Found	Strictly pure 56.65	13
Morris Herrman & Co., New York	Paris Green	Friendship	Guaranteed Found	Strictly pure 60.16	14
Fred L. Lavanberg, New York	Paris Green	Friendship	Guaranteed Found	Strictly pure 56.55	15
Strong & Cobb (jobbers), Cleveland, Ohio	Paris Green	Friendship	Guaranteed Found	——— ——— 55.58	16
George E. Lavereck, Buffalo, N. Y.	Paris Green	Franklinville	Guaranteed Found	——— ——— 56.28	18
O. W. Clark & Sons, Buffalo, N. Y.	Paris Green	East Aurora	Guaranteed Found	——— ——— 56.65	21
Acme Color Works, 100 William street, New York	Paris Green	West Valley	Guaranteed Found	——— ——— 56.02	22
I. Pfeiffer, New York	Paris Green	Little Valley	Guaranteed Found	Strictly pure 55 89	23
Maltby Chemical Co., Buffalo	Paris Green	Cattaraugus	Guaranteed Found	——— ——— 56.28	24
Hamden Paint and Chemical Co., Springfield, Mass.	Paris Green	Jamestown	Guaranteed Found	——— ——— 56.15	27
Leggett & Bros., New York	Paris Green	Rochester	Guaranteed Found	——— ——— 56.15	29
A. B. Ansbacher & Co., New York	Paris Green	Rochester	Guaranteed Found	——— ——— 55.89	30
Highlands Chemical Co., 100 William street, New York	Paris Green	Rochester	Guaranteed Found	Strictly pure 56.15	31

AGRICULTURAL SOCIETIES.

The appropriations made by the Legislature for the promotion of agriculture, to be distributed to agricultural societies, were $183,773.91. The acts appropriating these moneys and the amounts appropriated thereby are as follows: Chapter 593 of the Laws of 1898, $86,000; chapter 218 of the Laws of 1899, $98,000; but there being but $97,773.91 available in the State Treasurer's hands, that amount only was apportioned to the agricultural societies, thus making the total amount of $183,773.91 appropriated and paid to the agricultural societies of the State for the fairs of 1898; $20,000 of this was a direct appropriation to the New York State Agricultural Society, and $6,000 was paid to societies claiming $2,000 each, under the provisions of chapter 587 of the Laws of 1895, thus leaving the sum of $157,773.91 to be distributed to the societies upon the basis of premiums paid in 1898; of this amount $97,773.91 were moneys derived from the provisions of chapter 479 of the Laws of 1887, as amended by chapter 197 of the Laws of 1894, and chapter 570 of the Laws of 1895, and commonly known as the "Ives pool moneys."

There was reserved, pending the settlement of a question between two agricultural societies in the county of Rensselaer as to their rights to participate in the distribution of the moneys, the sum of $4,942.12, which amount is now in the hands of the State Treasurer awaiting a settlement of the question in dispute.

The amounts apportioned and paid to the agricultural societies in the State entitled to the above-named moneys are as follows:

New York State Agricultural Society	$22,000 00
Hornellsville Farmers' Club	2,000 00
Cambridge Valley Agricultural Society and Stock Breeders' Association	2,000 00
Albany County Agricultural Society and Exposition	2,114 33
Allegany County Agricultural Society	1,340 85
Broome County Agricultural Society	1,678 01
Cattaraugus County Agricultural Society	1,606 74
Chemung County Agricultural Society	1,787 85

Chenango County Agricultural Society	$1,606 10
Clinton County Agricultural Society	2,480 68
Columbia County Agricultural Society	2,534 37
Cortland County Agricultural Society	1,723 33
Delaware County Agricultural Society	1,703 49
Dutchess County Agricultural Society	4,352 55
Erie County Agricultural Society	2,599 60
Essex County Agricultural Society	1,413 88
Franklin County Agricultural Society	2,255 36
Fulton County Agricultural Society	2,845 32
Genesee County Agricultural Society	1,843 44
Greene County Agricultural Society	1,391 28
Herkimer County Agricultural Society	1,634 40
Jefferson County Agricultural Society	2,658 32
Lewis County Agricultural Society	1,729 10
Brookfield Agricultural Society	1,503 21
Montgomery County Agricultural Society	1,875 54
American Institute of the City of New York	1,984 43
Niagara County Agricultural Society	1,579 76
Oneida County Agricultural Society	1,495 76
Onondaga County Fair	2,315 98
Ontario County Agricultural Society	1,990 09
Orange County Agricultural Society	3,161 45
Orleans County Agricultural Society	1,959 59
Oswego County Agricultural Society	2,351 60
Otsego County Agricultural Society	2,197 69
Putnam County Agricultural Society	1,382 23
Queens County Agricultural Society	3,828 11
Rockland County Agricultural Society	1,477 20
St. Lawrence County Agricultural Society	2,000 43
Saratoga County Agricultural Society	2,113 65
Schoharie County Agricultural Society	2,000 58
Schuyler County Agricultural Society	1,500 50
Seneca County Agricultural Society	1,867 34
Steuben County Agricultural Society	2,592 56

Suffolk County Agricultural Society	$2,207 68
Sullivan County Agricultural Society	1,868 79
Tioga County Agricultural Society	1,664 35
Tompkins County Agricultural Society	2,229 61
Ulster County Agricultural Society	1,706 97
Washington County Agricultural Society	2,973 03
Wayne County Agricultural Society	1,747 25
Westchester County Agricultural Society	4,635 98
Wyoming County Agricultural Society	1,445 14
Yates County Agricultural Society	1,524 36
Cuba Fair Society	1,356 71
Wellsville Fair Association	1,240 07
Binghamton Industrial Exposition	2,006 74
Franklinville Driving Park and Agricultural Society	1,258 87
Afton Driving Park and Agricultural Society	1,573 21
Riverside Agricultural Society	1,508 40
Columbia Agricultural and Horticultural Association	1,505 32
Catskill Mountain Agricultural Society	1,059 81
Delaware Valley Agricultural Society	2,310 24
Cape Vincent Agricultural Society	993 33
Hemlock Lake Union Agricultural Society	1,452 21
Brockport Union Agricultural Society	2,155 50
Boonville Fair Association	1,189 19
Phœnix Union Agricultural Society	997 02
Gorham Agricultural Society	992 32
Naples Union Agricultural Society	986 74
Sandy Creek, Richland, Orwell and Boylston Agricultural Society	1,650 19
Morris Fair Association	2,243 29
Oneonta Union Agricultural Society	2,297 72
Richfield Springs Agricultural Society	1,203 77
Schenevus Valley Agricultural Society	973 33

Rockland County Industrial Association	$1,005 39
Gouverneur Agricultural and Mechanical Society,	1,464 86
Racket Valley and St. Regis Valley Agricultural Society	1,749 89
Cobleskill Agricultural Society	3,063 91
Prattsburgh Union Agricultural Society	941 72
Southern Steuben Agricultural Society	991 01
Northern Tioga Agricultural Society	1,274 48
Dryden Agricultural Society	1,722 22
Union Agricultural and Horticultural Society (Trumansburgh)	1,259 91
Palmyra Union Agricultural Society	1,806 64
Silver Lake Agricultural Society	1,032 14
Dundee Fair Association	1,110 97

CASES MADE AND SUBMITTED TO THE ATTORNEY-GENERAL.

During the fiscal year ending September 30, 1899, we have detected violations of the Agricultural Law and made and reported to the Attorney-General the following cases, viz.:

OCTOBER 3, 1898.

MILK.

Cases Nos. 2579, 2583.

OCTOBER 4, 1898.

MILK.

Case No. 7453.

OCTOBER 5, 1898.

MILK.

Cases Nos. 6449, 2235, 4522, 4456, 4505.

OCTOBER 6, 1898.

MILK.

Case No. 6905.

OCTOBER 8, 1898.

MILK.

Case No. 7154.

OCTOBER 14, 1898.

MILK.

Case No. 7454.

OCTOBER 22, 1898.

MILK.

Cases Nos. 2222, 4538, 4537, 6445, 6401, 4518, 2219.

OCTOBER 25, 1898.

MILK.

Cases Nos. 6902, 2570.

OCTOBER 27, 1898.

MILK.

Cases Nos. 6731, 7411, 4793, 4723, 6735.

NOVEMBER 1, 1898.

OLEOMARGARINE.

Cases Nos. 2469, 2545, 2470, 2371, 2460, 2472, 2455, 2468, 2458, 2467, 2462.

VINEGAR.

Cases Nos. 2558, 2559, 2556, 2555, 2563.

MILK.

Case No. 753.

NOVEMBER 4, 1898.

MILK.

Cases Nos. 6446, 6442, 7801, 4530.

NOVEMBER 11, 1898.

OLEOMARGARINE.

Cases Nos. 2474, 2473, 2424, 2423, 2420, 2456, 2425, 2476.

VINEGAR.

Cases Nos. 2566, 2565.

NOVEMBER 12, 1898.

MILK.

Case No. 7195.

NOVEMBER 16, 1898.

MILK.

Cases Nos. 5870, 5927, 5852, 5868, 5867, 5855, 7365, 7356, 7357, 5930, 7358, 7359.

NOVEMBER 21, 1898.

MILK.

Case No. 5869.

NOVEMBER 25, 1898.

MILK.

Cases Nos. 7171, 7174.

NOVEMBER 29, 1898.

MILK.

Cases Nos. 5976, 5959, 5968, 4328, 5958.

DECEMBER 2, 1898.

MILK.

Case No. 6906.

DECEMBER 14, 1898.

OLEOMARGARINE.

Cases Nos. 2477, 2479, 2481, 2482, 2483, 2484, 2549, 2546, 2456, 2437, 2434, 2435, 2431, 2425, 2530, 2547, 2488, 2480, 2440, 2436.

DECEMBER 15, 1898.

MILK.

Case No. 4968.

DECEMBER 16, 1898.

MILK.

Cases Nos. 5705, 5704, 7415.

STABLES.

Cases Nos. 8, 9.

DECEMBER 17, 1898.

MILK.

Cases Nos. 6459, 6458, 5800, 5032, 5007, 5799.

DECEMBER 19, 1898.

STABLES.

People v. Willis Conklin.

DECEMBER 22, 1898.

OLEOMARGARINE.

Cases Nos. 1946, 1387, 2438, 2439, 2444, 2445, 2446, 2448, 2449, 2450, 2478, 2487, 2489, 2491, 2493, 2494, 2522.

DECEMBER 29, 1898.

OLEOMARGARINE.

Case No. 2456.

JANUARY 6, 1899.

VINEGAR.

Cases Nos. 1679, 1686, 1675, 1682, 1683.

JANUARY 12, 1899.

BOB VEAL.

People v. Jacob Lieberman.

VINEGAR.

Cases Nos. 1866, 1863, 1865.

MILK.

Case No. 5124.

JANUARY 16, 1899.

OLEOMARGARINE.

Cases Nos. 2624, 2603, 3355, 2620, 3369, 2626, 2617, 2615, 2609, 3366, 3372, 3373, 2614, 3367, 3368, 2612, 3360, 2618, 3356, 3370, 3371, 2604, 2607, 2605, 2499, 2601, 3352, 3351, 2606, 3353, 2500, 2616, 2613, 2496, 3358, 3361, 3359, 3375, 2622, 2623, 3378.

JANUARY 19, 1899.

MILK.

Cases Nos. 5917, 5885, 3284, 5873, 5872, 7306, 3276, 5891, 5889, 5919, 5916, 5908, 5886, 5887, 5903, 3276, 5892, 5884, 5890.

JANUARY 24, 1899.

OLEOMARGARINE.

Cases Nos. 1603, 1560, 1566, 1558, 1563, 1561, 1562, 1464, 1465, 1557.

JANUARY 26, 1899.

MILK.

Cases Nos. 3026, 5328, 6453, 6455, 6457, 6454, 5011, 5799, 5007, 5032, 5800, 6458, 6459, 5019, 5008, 2936.

VINEGAR.

Cases Nos. 637, 1999, 2000, 2064, 2066, 2065, 773.

FEBRUARY 7, 1899.

OLEOMARGARINE.

Cases Nos. 3395, 2383, 2630, 3399, 3362, 2497, 3391, 3363, 3379, 2442, 2625, 3381, 3380, 2498, 1980, 2632.

FEBRUARY 9, 1899.

VINEGAR.

Cases Nos. 1478, 1475, 1477.

FEBRUARY 17, 1899.

MILK.

Case No. 5712.

FEBRUARY 22, 1899.

MILK.

Case No. 7416.

FEBRUARY 28, 1899.

OLEOMARGARINE.

Cases Nos. 2611, 2636, 3376, 3301, 3400, 2635, 3254, 3279, 2650, 2643, 2645.

MARCH 3, 1899.

MILK.

Case No. 7419.

MARCH 7, 1899.

VINEGAR.

Cases Nos. 1697, 1690, 1588, 1589.

MILK.

Cases Nos. 7196, 5727, 5729, 4540, 10609.

MARCH 8, 1899.

MILK.

Case No. 7418.

MARCH 27, 1899.

OLEOMARGARINE.

Cases Nos. 2646, 3262, 3311, 3309, 3306, 2642, 3303, 3263, 2621, 3305, 3257, 3261, 3256.

LINSEED OIL.

Cases M. & G., A. & A.

MARCH 28, 1899.

MILK.

Cases Nos. 7420, 7011.

MARCH 29, 1899.

MILK.

Case No. 7422.

APRIL 6, 1899.

MILK.

Case No. 5736.

APRIL 10, 1899.

OLEOMARGARINE.

Cases Nos. 1599, 1467, 1598.

VINEGAR.

Cases Nos. 2355, 2229, 2253.

MILK.

Cases Nos. 7577, 7586, 7583, 7580, 7589, 7569, 7598, 6796, 4333, 6026.

APRIL 11, 1899.

MILK.

Case No. 6911.

APRIL 21, 1899.

OLEOMARGARINE.

Cases Nos. 3260, 3313, 3267, 3266, 3264, 3312, 3319, 2428, 3277.

LINSEED OIL.

Cases, G. & S., F. & K.

VINEGAR.

Cases Nos. 2567, 2571, 2568.

APRIL 27, 1899.

MILK.

Cases Nos. 7702, 7701.

APRIL 28, 1899.

MILK.

Case No. 1205.

APRIL 29, 1899.

MILK.

Case No. 7703.

MAY 1, 1899.

BOB VEAL.

People v. A. O. Casler.

MAY 9, 1899.

MILK.

Cases Nos. 1072, 7355, 7353.

MAY 10, 1899.

STABLE CASE.

People v. Benjamin Klehamer.

MAY 11, 1899.

MILK.

Case No. 7459.

MAY 13, 1899.

BOB VEAL.

People v. Elias Keller.

OLEOMARGARINE.

Cases Nos. 2320, 3271, 3280, 3268, 3282.

LINSEED OIL.

Case No. 105.

CONDENSED MILK.

Cases Nos. 7625, 7624.

MILK.

Cases Nos. 7627, 7626.

MAY 13, 1899.

BOB VEAL.

People v. J. G. Sloat.
People v. Frank Drake.

MAY 16, 1899.

BOB VEAL.

People v. G. L. Gregory.
People v. C. C. Horton.
People v. L. J. Buchanan.
People v. R. L. Jones.
People v. N. Potter.
People v. Edward Marcy.
People v. J. R. Smith.
People v. J. Brown.

MILK.

Cases Nos. 7180, 7190, 7191.

MAY 17, 1899.

MILK.

Cases Nos. 6123, 6112, 6102, 7599, 6130, 6103, 6104, 6106, 6800, 6105, 7242.

BOB VEAL.

People v. Frank Marcy.
People v. J. G. Sloat.

MAY 19, 1899.

BOB VEAL.

People v. A. E. Burke.

MAY 20, 1899.

BOB VEAL.

People v. Thomson.

MAY 23, 1899.

MILK.

Cases Nos. 7461, 7466, 7464, 7460.

MAY 26, 1899.

BOB VEAL.

People v. A. Iseneker.

JUNE 2, 1899.

MILK.

Case No. 10602.

JUNE 6, 1899.

OLEOMARGARINE.

Cases Nos. 3323, 3322, 3279, 2623.

VINEGAR.

Case No. 2574.

MILK.

Case No. 7465.

JUNE 8, 1899.

MILK.

Case No. 7426.

BOB VEAL.

People v. H. Page.

JUNE 9, 1899.

MILK.

Case No. 7427.

JUNE 13, 1899.

MILK.

Cases Nos. 8405, 8414, 8415.

VINEGAR.

Case No. 1582.

JUNE 13, 1899.

MILK.

Cases Nos. 6462, 2689, 6461.

OLEOMARGARINE.

Cases Nos. 2006, 2004.

JUNE 15, 1899.

MILK.

Cases Nos. 7705, 7704, 7707, 7456.

JUNE 17, 1899.

MILK.

Case No. 7429.

JUNE 24, 1899.

MILK.

Cases Nos. 7432, 7433.

JUNE 28, 1899.

MILK.

Case No. 6915.

JUNE 28, 1899.

MILK.

Cases Nos. 7671, 7665, 7661, 7633, 7655, 7666, 7652, 7604, 7602, 7641, 7656, 7658, 7611, 7631, 7635, 7644, 7614, 7636,

7639, 7664, 7628, 7630, 7601, 7634, 7640, 7629, 7660, 7613, 7615.

JULY 3, 1899.

OLEOMARGARINE.

Cases Nos. 3332, 3336, 3308, 2427, 3325, 2639, 3291, 3292, 3334.

JULY 7, 1899.

MILK.

Cases Nos. 7282, 4965.

JULY 11, 1899.

MILK.

Case No. 7435.

JULY 12, 1899.

MILK.

Cases Nos. 8442, 8418, 8422, 8437.

STABLE CASE.

People v. Isaac Linesinger.

JULY 15, 1899.

STABLE CASES.

People v. Austin M. White.
People v. Clifford F. Warrant.

JULY 17, 1899.

MILK.

Cases Nos. 7436, 7434, 7469, 7437.

JULY 21, 1899.

MILK.

Cases Nos. 10601, 7708.

JULY 24, 1899.

MILK.

Cases Nos. 7440, 7438, 7194, 7441, 8051.

JULY 26, 1899.

MILK.

Cases Nos. 4967, 4970, 387.

JULY 28, 1899.

MILK.

Cases Nos. 8926, 8920, 8921, 8923, 8918, 8916, 8915, 8914, 8912, 8910, 8909, 8901, 7675, 7674, 7672, 7670, 7669, 7668, 7667, 7662, 7653, 7646, 7645.

OLEOMARGARINE.

Cases Nos. 2354, 3337, 3335, 3299, 3298, 3297, 3296, 3295, 3294.

VINEGAR.

Case No. 2560.

JULY 29, 1899.

MILK.

Case No. 7444.

JULY 31, 1899.

MILK.

Cases Nos. 7710, 7709, 7442, 7472, 7473, 7474.

AUGUST 4, 1899.

MILK.

Cases Nos. 5045, 5044, 5043, 6467, 5039, 6464, 5040, 6501, 6470, 6502, 5042.

AUGUST 4, 1899.

MILK.

Case No. 10608.

AUGUST 7, 1899.

MILK.

Case No. 7471.

AUGUST 8, 1899.

MILK.

Cases Nos. 8055, 8053, 8057, 8067, 8066, 8073.

AUGUST 9, 1899.

MILK.

Cases Nos. 7445, 7447, 7480, 7013, 7481, 7712.

AUGUST 10, 1899.

MILK.

Cases Nos. 7014, 7015.

AUGUST 15, 1899.

MILK.

Cases Nos. 7449, 7015.

AUGUST 18, 1899.

MILK.

Cases Nos. 6953, 6952.

AUGUST 21, 1899.

MILK.

Case No. 6921.

AUGUST 22, 1899.

MILK.

Cases Nos. 6956, 6954.

AUGUST 25, 1899.

MILK.

Cases Nos. 6922, 4972, 6931, 6020, 8191, 6025, 8194, 8190, 6019, 6048.

AUGUST 28, 1899.

MILK.

Cases Nos. 7489, 7484, 7488, 7485, 7715.

AUGUST 31, 1899.

MILK.

Cases Nos. 6958, 6957, 6959.

SEPTEMBER 2, 1899.

MILK.

Case No. 4457.

SEPTEMBER 5, 1899.

MILK.

Cases Nos. 4542, 7714, 7713, 7475.

SEPTEMBER 6, 1899.

MILK.

Cases Nos. 8450, 8463, 8469, 8472, 8480, 8484, 8489, 8491, 8492, 8493, 8494, 9004, 9005, 9007.

SEPTEMBER 7, 1899.

MILK.

Case No. 6960.

SEPTEMBER 8, 1899.

MILK.

Case No. 7023.

SEPTEMBER 11, 1899.

MILK.

Cases Nos. 7254, 7255, 8071, 8060, 8061, 8059, 8076, 7199, 8080, 8082, 7024, 10610, 10605, 6407, 6408, 9253, 9255, 7023.

SEPTEMBER 12, 1899.

MILK.

Cases Nos. 9257, 9252.

SEPTEMBER 13, 1899.

MILK.

Cases Nos. 6936, 4971, 6934, 8951, 7717, 7718.

SEPTEMBER 14, 1899.

OLEOMARGARINE.

Cases Nos. 2651, 2640, 3300.

MILK.

Cases Nos. 8932, 7612, 8927, 8903, 8928, 9259.

VINEGAR.

Cases Nos. 2656, 2654, 2653, 2660.

SEPTEMBER 18, 1899.

OLEOMARGARINE.

Cases Nos. 3347, 2657, 3345, 2659, 2660, 2637.

MILK.

Cases Nos. 8919, 8934.

SEPTEMBER 20, 1899.

MILK.

Case No. 8085.

SEPTEMBER 22, 1899.

BOB VEAL.

People v. Emerson Eckler.

SEPTEMBER 25, 1899.

BOB VEAL.

People v. Leonard Angle.

MILK.

Cases Nos. 6471, 6472, 6023, 6022, 8197, 6011, 6013, 6014, 6015, 8196, 6430, 5047, 5048, 6473.

SEPTEMBER 28, 1899.

MILK.

Cases Nos. 9008, 9010, 8904.

DETAILED STATEMENT.

The following is a detailed statement of expenditures of money by this Department:

DETAILED STATEMENT OF THE SALARIES AND EXPENSES, FOR THE YEAR 1899, OF THE COMMISSIONER, ASSISTANT COMMISSIONERS, EXPERTS, AGENTS, CHEMISTS, ETC.

NAME.	Position held.	Date.		Services.	Expenses.
		1898.			
V. C. Beebe	Assistant Commissioner	October	5	$125 00	$47 25
J. P. Clark	do		5	250 00	179 58
T. James Owens	do		5	125 00	21 25
S. B. Richardson	do		5	125 00	45 15
C. T. Russell	do		5	125 00	32 24
A. L. Twitchell	do		5	125 00	74 12
Geo. D. Babcock	Agent		5	75 00	66 89
W. J. Bennett	do		5	75 00	80 11
M. T. Cain	do		5	60 00	5 20
A. D. Clark	do		5	80 00	52 71
W. J. Corbett	do		5	75 00	65 98
J. J. Coughlin	do		5	75 00	57 96
R. T. Courtney	do		5	60 00	10 50
A. S. Delano	do		5	75 00	27 30
M. Dugan	do		5	75 00	78 25
J. R. Earl	do		5	75 00	34 31
M. Galligan	do		5	75 00	26 03
W. E. Griffith	do		5	60 00	70 08
C. S. Kellogg	do		5	75 00	79 42
A. M. Kibbe	do		5	75 00	66 67
R. R. Kirkland	do		5	150 00	223 48

J. E. Kruse	do	5	75 00	99 13
R. McAdam	do	5	75 00	79 66
J. McGuire	do	5	80 00	52 50
C. J. Morganstern	do	5	75 00	72 07
C. F. Nash	do	5	75 00	81 48
J. T. Norton	do	5	75 00	86 57
R. H. Palmer	do	5	75 00	61 71
W. C. Patrick	do	5	80 00	81 01
W. B. Reading	do	5	75 00	18 42
H. A. Rees	do	5	100 00	111 71
M. S. Rivenburg	do	5	30 00	35 00
Charles Sears	do	5	80 00	65 47
F. C. Slaughter	do	5	75 00	85 93
C. J. Standart	do	5	75 00	51 96
N. Van Horne	do	5	75 00	80 12
C. B. Wakefield	do	5	75 00	99 44
C. A. Warren	do	5	75 00	34 46
F. R. Eilinger	Chemist	5	55 00	.....
E. G. Love	do	5	58 75	.....
John A. Miller	do	5	100 00	1 00
F. P. Van Denburgh	do	5	45 00	1 36
J. C. Wilson	do	5	50 00	.....
A. B. Rossman	Stenographer	5	50 00	.....
G. L. Flanders	Ass't Commissioner (see foot-note)	5	.....	489 63
John Evans	Clerk	5	50 00	.....
C. H. Allen	Agent	5	75 00	12 55
R. T. Courtney	do	5	60 00	7 05
R. A. French	do	5	75 00	55 77

NOTE.—This amount, and any of like charact er of G. L. Flanders, is for printing, postage, expressage, stationery, etc., for the department.

DETAILED STATEMENT, ETC.—(*Continued*).

NAME.	Position held.	Date.	Services.	Expenses.
		1898.		
Theo. Deecke	Chemist	October 5	$35 00	.....
J. F. Geisler	do	5	112 00	$2 00
John A. Miller	do	5	30 00	.....
H. C. Troy	do	5	100 00	13 20
E. J. Wheeler	do	5	166 66	.....
W. H. Kelly	Veterinarian	5	82 50	69 34
E. P. McKeefe	Laborer	5	40 00	.....
C. D. Flanders	do	5	50 00	1 04
E. A. Dowd	Stenographer	5	50 00	.....
H. S. Ambler	Assistant Commissioner	10	208 33	79 40
F. H. Kracke	do	10	208 33	93 36
Charles Burke	Agent	10	75 00	28 10
A. D. Clark	do	10	80 00	58 00
J. M. Esmay	do	10	75 00	76 98
J. McGuire	do	10	80 00	55 31
M. T. Morgan	do	10	100 00	101 20
W. B. Mynderse	do	10	60 00	40 61
J. F. Geisler	Chemist	10	161 00	2 50
E. J. Wheeler	do	10	206 66	40 71
H. S. Matteson	Agent	11	60 00	80 73
V. P. D. Lee	Agent and proofreader	12	.....	58 03
M. Quigley	Veterinarian	12	500 00	62 64
J. P. Clark	Assistant Commissioner	20	125 00	71 79

W. T. Hughes	do	20	125 00	46	69
T. James Owens	do	20	125 00	26	26
S. B. Richardson	do	20	125 00	79	18
C. T. Russell	do	20	125 00	58	94
A. L. Twitchell	do	20	125 00	54	11
Geo. D. Babcock	Agent	20	75 00	73	38
W. J. Bennett	do	20	75 00	72	97
Geo. Bernhard	do	20	75 00	99	56
M. T. Cain	do	20	60 00	10	87
W. J. Corbett	do	20	75 00	84	02
J. J. Coughlin	do	20	75 00	28	08
A. S. Delano	do	20	75 00	22	31
M. Dugan	do	20	75 00	67	96
J. R. Earl	do	20	75 00	13	48
R. A. French	do	20	75 00	52	03
M. Galligan	do	20	75 00	13	79
W. J. Gentes	do	20	80 00	46	55
W. E. Griffith	do	20	60 00	89	60
C. S. Kellogg	do	20	75 00	67	74
A. M. Kibbe	do	20	75 00	73	36
R. R. Kirkland	do	20	75 00	105	92
J. E. Langdon	do	20	75 00	65	68
R. McAdam	do	20	75 00	66	68
V. A. Moore	Bacteriologist	20	.....	11	17
C. F. Nash	Agent	20	75 00	75	91
J. T. Norton	do	20	75 00	78	47
R. H. Palmer	do	20	75 00	67	95
W. C. Patrick	do	20	80 00	93	17
J. M. Quigley	do	20	75 00	60	20

DETAILED STATEMENT, ETC.—(*Continued*).

NAME.	Position held.	Date.		Services.	Expenses.
		1898.			
W. B. Reading	Agent	October	20	$75 00	$35 99
H. A. Rees	do		20	100 00	36 48
Charles Sears	do		20	80 00	55 53
F. C. Slaughter	do		20	75 00	83 14
J. W. Smith, 2d	do		20	25 00	15 62
N. Van Horne	do		20	75 00	63 00
C. A. Warren	do		20	75 00	22 12
F. R. Eilinger	Chemist		20	15 00	.....
John A. Miller	do		20	130 00	.....
H. C. Troy	do		20	100 00	20 42
J. C. Willson	do		20	50 00	.....
Edward Coyle	Safe expert		20	28 00	.....
C. J. Morganstern	Agent		20	75 00	47 67
V. C. Beebe	Assistant Commissioner		20	125 00	41 51
J. W. Smith, 2d	Agent		20	150 00	115 14
M. S. Rivenburg	do		25	60 00	77 96
W. W. Hall	do		27	100 00	94 31
C. J. Standart	do		27	75 00	28 93
Theo. Deecke	Chemist		27	10 00	.....
W. M. Smith	do		27	50 00	2 48
H. D. Stebbins	.....		27	6 00	.....
C. A. Wieting	Commissioner	November	1	333 33	41 67
G. L. Flanders	Assistant Commissioner		1	208 33	41 67

V. P. D. Lee	Agent and proofreader	1	125 00	.....
J. M. Hutchings	Agent	1	75 00	.....
G. B. Fellows	do	1	75 00	.....
H. F. Rossman	Stenographer	1	60 00	.....
John Evans	Clerk	3	50 00	.....
G. L. Flanders	Assistant Commissioner	4	.....	677 66
W. E. Walker	Chemist	7	40 00	.....
H. S. Ambler	Assistant Commissioner	10	208 33	68 87
W. T. Hughes	do	10	125 00	36 33
F. J. Kracke	do	10	208 33	98 25
A. L. Twitchell	do	10	125 00	54 71
E. A. Dowd	Stenographer	10	60 00	.....
C. H. Allen	Agent	10	75 00	22 65
Geo. Bernhard	do	10	75 00	80 89
Charles Burke	do	10	75 00	21 50
E. F. Burke	do	10	75 00	162 94
J. M. Esmay	do	10	75 00	92 16
G. B. Fellows	do	10	.....	4 94
J. E. Kruse	do	10	75 00	60 75
J. E. Langdon	do	10	75 00	44 27
H. S. Matteson	do	10	75 00	73 62
M. T. Morgan	do	10	100 00	98 89
W. B. Mynderse	do	10	75 00	48 05
W. C. Patrick	do	10	80 00	64 10
J. M. Quigley	do	10	75 00	58 54
J. W. Smith, 2d	do	10	75 00	58 42
C. B. Wakefield	do	10	75 00	85 51
John A. Miller	Chemist	10	100 00	.....
E. J. Wheeler	do	10	166 66	79 50

DETAILED STATEMENT, ETC.—(*Continued*).

NAME.	Position held.	Date.		Services.	Expenses.
		1898.			
W. H. Kelly	Veterinarian	November	10	$97 50	$64 41
C. D. Flanders	Laborer		10	50 00	11 71
E. P. McKeefe	do		10	40 00	.....
R. T. Courtney	Agent		10	60 00	26 89
G. L. Flanders	Assistant Commissioner		29	208 33	41 67
C. A. Wieting	Commissioner	December	1	333 33	41 67
V. P. D. Lee	Agent and proofreader		1	125 00	.....
J. M. Hutchings	Agent		1	75 00	.....
G. B. Fellows	do		1	75 00	.....
H. F. Rossman	Stenographer		1	60 00	.....
V. C. Beebe	Assistant Commissioner		2	125 00	49 95
J. P. Clark	do		2	125 00	43 26
T. James Owens	do		2	125 00	17 38
S. B. Richardson	do		2	125 00	60 01
C. T. Russell	do		2	125 00	67 10
W. J. Bennett	Agent		2	75 00	73 80
J. H. Bevier	do		2	40 00	43 05
M. T. Cain	do		2	60 00	16 55
A. D. Clark	do		2	80 00	53 45
W. J. Gentes	do		2	80 00	59 06
W. E. Griffith	do		2	60 00	87 07
W. W. Hall	do		2	100 00	93 88
J. McGuire	do		2	80 00	52 25

J. T. Norton	do	2	75 00	46 87
R. H. Palmer	do	2	75 00	40 15
H. A. Rees	do	2	100 00	89 66
M. S. Rivenburg	do	2	60 00	81 22
Charles Sears	do	2	80 00	60 07
F. C. Slaughter	do	2	75 00	63 01
C. J. Standart	do	2	75 00	14 00
N. Van Horne	do	2	75 00	70 08
C. A. Warren	do	2	75 00	9 13
J. F. Geisler	Chemist	2	102 13	2 00
S. A. Lattimore	do	2	10 00	.....
C. D. Flanders	Laborer	2	18 33	.....
J. C. Wilson	Chemist	2	50 00	4 50
E. G. Love	do	2	40 50	.....
Geo. D. Babcock	Agent	5	75 00	60 79
W. J. Corbett	do	5	75 00	76 79
J. J. Coughlin	do	5	75 00	10 25
A. S. Delano	do	5	75 00	12 90
M. Dugan	do	5	75 00	58 60
J. R. Earl	do	5	75 00	6 59
M. Galligan	do	5	75 00	11 60
C. S. Kellogg	do	5	75 00	64 05
A. M. Kibbe	do	5	75 00	79 56
R. R. Kirkland	do	5	75 00	111 15
J. E. Kruse	do	5	75 00	76 79
R. McAdam	do	5	75 00	59 46
C. J. Morganstern	do	5	75 00	35 58
C. F. Nash	do	5	75 00	53 99
W. B. Reading	do	5	75 00	10 40

DETAILED STATEMENT, ETC.—(*Continued*).

NAME.	Position held.	Date.	Services.	Expenses.
		1898.		
H. S. Ambler	Assistant Commissioner	December 7	$208 33	$58 89
F. J. Kracke	do	7	208 33	85 22
John Evans	Clerk	7	50 00	.....
E. A. Dowd	Stenographer	7	60 00	.....
C. H. Allen	Agent	7	75 00	20 56
Charles Burke	do	7	75 00	26 85
E. F. Burke	do	7	75 00	87 35
R. T. Courtney	do	7	60 00	18 97
J. M. Esmay	do	7	75 00	83 08
G. B. Fellows	do	7	.....	6 20
V. P. D. Lee	Agent and proofreader	7	.....	24 95
H. S. Matteson	Agent	7	75 00	57 01
V. A. Moore	Bacteriologist	7	15 00	9 03
M. T. Morgan	Agent	7	100 00	88 07
W. B. Mynderse	do	7	75 00	41 06
G. A. Smith	do	7	.....	27 14
C. B. Wakefield	do	7	75 00	81 13
Theo. Deecke	Chemist	7	85 00	3 35
J. F. Geisler	do	7	131 25	1 25
E. G. Love	do	7	131 75	.....
P. C. McIlhiney	do	7	6 00	50
John A. Miller	do	7	50 00	.....
W. M. Smith	do	7	10 00	68

H. C. Troy	do	7	100 00	12 10
W. E. Walker	do	7	40 00	.....
E. J. Wheeler	do	7	216 66	106 96
W. H. Kelly	Veterinarian	7	105 00	103 09
E. P. McKeefe	Laborer	7	40 00	.....
V. C. Beebe	Assistant Commissioner	15	125 00	39 22
J. P. Clark	do	15	125 00	11 14
W. T. Hughes	do	15	125 00	29 13
T. James Owens	do	15	125 00	20 37
S. B. Richardson	do	15	125 00	59 12
C. T. Russell	do	15	125 00	57 01
A. L. Twitchell	do	15	125 00	55 36
Geo. D. Babcock	Agent	15	75 00	32 04
W. J. Bennett	do	15	75 00	69 28
Geo. Bernhard	do	15	75 00	82 41
J. H. Bevier	do	15	60 00	62 15
A. D. Clark	do	15	80 00	45 65
W. J. Corbett	do	15	75 00	32
J. J. Coughlin	do	15	75 00	12 65
A. S. Delano	do	15	75 00	20 21
M. Dugan	do	15	75 00	59 96
J. R. Earl	do	15	75 00	13 72
R. A. French	do	15	150 00	97 45
M. Galligan	do	15	75 00	11 00
W. J. Gentes	do	15	80 00	52 10
W. E. Griffith	do	15	60 00	72 72
W. W. Hall	do	15	100 00	77 13
C. S. Kellogg	do	15	75 00	51 79
A. M. Kibbe	do	15	75 00	64 43

DETAILED STATEMENT, ETC.—(*Continued*).

NAME.	Position held.	Date.	Services.	Expenses.
		1898.		
R. R. Kirkland	Agent	December 15	$75 00	$38 38
John E. Kruse	do	15	75 00	20 82
J. E. Langdon	do	15	75 00	45 12
R. McAdam	do	15	75 00	32 92
J. McGuire	do	15	80 00	51 66
C. J. Morganstern	do	15	75 00	29 05
J. T. Norton	do	15	75 00	59 83
W. C. Patrick	do	15	80 00	73 19
J. M. Quigley	do	15	75 00	67 72
H. A. Rees	do	15	100 00	71 78
Charles Sears	do	15	80 00	52 30
F. C. Slaughter	do	15	75 00	66 96
J. W. Smith, 2d	do	15	75 00	78 09
C. J. Standart	do	15	75 00	10 35
N. Van Horne	do	15	75 00	37 09
C. B. Wakefield	do	15	75 00	13 72
C. A. Warren	do	15	75 00	9 83
W. J. Wadsworth	Veterinarian	15	7 00	84
C. H. Cook	do	15	10 00	.....
M. T. Cain	Agent	15	60 00	20 19
C. F. Nash	do	15	75 00	.....
W. B. Reading	do	15	75 00	.....
John A. Miller	Chemist	15	110 00	.....

H. C. Troy	do		15	100 00	15 48
J. C. Wilson	do		15	50 00	.....
A. B. Rossman	Stenographer		15	36 66	.....
G. L. Flanders	Assistant Commissioner		21	.....	325 48
C. A. Wieting	Commissioner		23	333 34	41 66
G. L. Flanders	Assistant Commissioner		23	208 34	41 66
V. P. D. Lee	Agent and proofreader		23	125 00	.....
J. M. Hutchings	Agent		23	75 00	.....
G. B. Fellows	do		23	75 00	.....
H. F. Rossman	Stenographer		23	60 00	.....
		1899.			
C. H. Allen	Agent	January	6	75 00	20 09
E. F. Burke	do		6	75 00	72 12
H. S. Matteson	do		6	75 00	59 95
W. B. Mynderse	do		6	75 00	28 70
R. H. Palmer	do		6	75 00	75 88
M. S. Rivenburg	do		6	60 00	78 26
E. P. McKeefe	Laborer		6	40 00	.....
W. E. Walker	Chemist		6	40 00	.....
E. J. Wheeler	do		6	50 00	12 85
John Evans	Clerk		6	50 00	.....
V. P. D. Lee	Agent and proofreader		6	.....	12 60
E. A. Dowd	Stenographer		6	60 00	.....
H. F. Rossman	do		6	.....	24 05
W. H. Kelly	Veterinarian		6	120 00	113 29
W. H. Pendry	do		6	25 00	.....
J. M. Esmay	Agent		7	75 00	89 23
M. T. Morgan	do		7	100 00	90 96
W. C. Patrick	do		7	80 00	88 26

DETAILED STATEMENT, ETC.—(*Continued*).

NAME.	Position held.	Date.	Services.	Expenses.
		1899.		
V. A. Moore	Bacteriologist	January 7	$30 00	$9 78
H. S. Ambler	Assistant Commissioner	18	208 33	34 42
V. C. Beebe	do	18	125 00	37 17
J. P. Clark	do	18	125 00	13 28
G. L. Flanders	do	18	.....	198 20
W. T. Hughes	do	18	125 00	28 73
F. J. Kracke	do	18	208 33	123 30
T. James Owens	do	18	125 00	11 98
S. B. Richardson	do	18	125 00	34 49
C. T. Russell	do	18	125 00	81 17
A. L. Twitchell	do	18	125 00	73 80
Geo. D. Babcock	Agent	18	75 00	15 52
W. J. Bennett	do	18	75 00	69 33
Geo. Bernhard	do	18	75 00	89 30
J. H. Bevier	do	18	60 00	62 20
Charles Burke	do	18	75 00	32 35
M. T. Cain	do	18	60 00	28 56
A. D. Clark	do	18	80 00	52 25
W. J. Corbett	do	18	75 00	22
J. J. Coughlin	do	18	75 00	15 05
R. T. Courtney	do	18	60 00	28 35
M. Dugan	do	18	75 00	59 23
J. R. Earl	do	18	75 00	19 52

G. B. Fellows	do	18	.....	5	05
R. A. French	do	18	75	00	48 71
M. Galligan	do	18	75	00	15 51
W. J. Gentes	do	18	80	00	56 80
W. E. Griffith	do	18	60	00	50 79
W. W. Hall	do	18	100	00	17 02
C. S. Kellogg	do	18	75	00	35 32
A. M. Kibbe	do	18	75	00	64 20
R. R. Kirkland	do	18	75	00	14 86
J. E. Kruse	do	18	75	00	1 16
J. E. Langdon	do	18	75	00	52 06
V. P. D. Lee	Agent and proofreader	18	.....	6	45
R. McAdam	Agent	18	75	00	16 95
J. McGuire	do	18	80	00	53 56
C. J. Morganstern	do	18	75	00	41 50
C. F. Nash	do	18	75	00	27 00
J. T. Norton	do	18	75	00	65 06
R. H. Palmer	do	18	75	00	55 86
J. M. Quigley	do	18	75	00	68 00
W. B. Reading	do	18	75	00	9 95
H. A. Rees	do	18	100	00	69 48
M. S. Rivenburg	do	18	60	00	87 91
Charles Sears	do	18	80	00	49 35
F. C. Slaughter	do	18	75	00	77 55
J. W. Smith, 2d	do	18	75	00	66 93
C. J. Standart	do	18	75	00	15 78
N. Van Horne	do	18	75	00	19 91
C. B. Wakefield	do	18	75	00	.....
C. A. Warren	do	18	75	00	23 31

DETAILED STATEMENT, ETC.—(*Continued*).

NAME.	Position held.	Date.		Service.	Expenses.
		1899.			
J. F. Geisler	Chemist	January	18	$30 00	$1 38
S. A. Lattimore	do		18	20 00	.....
John A. Miller	do		18	100 00	.....
H. C. Troy	do		18	100 00	2 80
E. J. Wheeler	do		18	216 66	28 76
J. C. Wilson	do		18	50 00	.....
H. B. Ambler	Veterinarian		18	101 25	31 54
M. J. Henderson	do		18	30 00	5 22
M. Quigley	do		18	500 00	123 97
E. G. Love	Chemist		18	244 25	4 50
C. A. Wieting	Commissioner	February	1	333 33	41 67
G. L. Flanders	Assistant Commissioner		1	208 33	41 67
V. P. D. Lee	Agent and proofreader		1	125 00	.....
J. M. Hutchings	Agent		1	75 00	.....
G. B. Fellows	do		1	75 00	.....
H. F. Rossman	Stenographer		1	60 00	.....
G. L. Flanders	Assistant Commissioner		3	.....	219 46
F. J. Kracke	do		3	208 33	167 49
C. H. Allen	Agent		3	75 00	25 16
Charles Burke	do		3	75 00	25 70
E. F. Burke	do		3	75 00	83 07
A. D. Clark	do		3	80 00	68 80
J. M. Esmay	do		3	75 00	96 73

G. B. Fellows	do	3	.....	5 05
W. J. Gentes	do	3	80 00	64 74
H. S. Matteson	do	3	75 00	56 54
M. T. Morgan	do	3	100 00	110 21
W. B. Mynderse	do	3	75 00	32 64
W. C. Patrick	do	3	80 00	95 39
John Evans	Clerk	3	50 00	.....
Maurice Perkins	Chemist	3	25 00	7 22
W. E. Walker	do	3	40 00	.....
E. J. Wheeler	do	3	216 66	15 15
John Arnold	Laborer	3	68 33	.....
E. P. McKeefe	do	3	40 00	.....
E. A. Dowd	Stenographer	3	60 00	.....
W. H. Kelly	Veterinarian	3	60 00	28 56
A. B. Rossman	Stenographer	10	33 33	29 10
V. C. Beebe	Assistant Commissioner	23	125 00	29 26
J. P. Clark	do	23	125 00	12 57
W. T. Hughes	do	23	125 00	29 87
T. James Owens	do	23	125 00	21 63
S. B. Richardson	do	23	125 00	64 73
C. T. Russell	do	23	125 00	58 94
A. L. Twitchell	do	23	125 00	65 63
Geo. D. Babcock	Agent	23	75 00	28 78
W. J. Bennett	do	23	75 00	77 63
Geo. Bernhard	do	23	75 00	63 52
J. H. Bevier	do	23	60 00	61 51
M. T. Cain	do	23	60 00	25 74
W. J. Corbett	do	23	75 00	14 24
J. J. Coughlin	do	23	75 00	78 15

DETAILED STATEMENT, ETC.—(*Continued*).

NAME.	Position held.	Date.	Services.	Expenses.
		1899.		
R. T. Courtney	Agent	February 23	$60 00	$19 64
M. Dugan	do	23	7 50	9 42
J. R. Earl	do	23	75 00	24 17
R. A. French	do	23	75 00	49 35
M. Galligan	do	23	75 00	11 15
W. W. Hall	do	23	100 00	58 27
C. S. Kellogg	do	23	75 00	35 20
A. M. Kibbe	do	23	75 00	48 87
R. R. Kirkland	do	23	75 00	30 41
J. E. Kruse	do	23	75 00	14 75
J. E. Langdon	do	23	75 00	35 87
R. McAdam	do	23	75 00	28 56
J. McGuire	do	23	80 00	96 44
C. J. Morganstern	do	23	75 00	38 03
J. M. Quigley	do	23	75 00	45 23
W. B. Reading	do	23	75 00	10 40
H. A. Rees	do	23	100 00	58 28
M. S. Rivenburg	do	23	6 00	6 26
Charles Sears	do	23	80 00	72 12
F. C. Slaughter	do	23	10 00	9 27
J. W. Smith, 2d	do	23	60 00	69 23
C. J. Standart	do	23	75 00	61 80
N. Van Horne	do	23	75 00	27 14

C. B. Wakefield	do		23	75 00	14 65
C. A. Warren	do		23	75 00	26 87
Theo. Deecke	Chemist		23	15 00	.....
J. F. Geisler	do		23	236 13	4 00
E. G. Love	do		23	171 25	.....
S. A. Lattimore	do		23	5 00	.....
John A. Miller	do		23	100 00	.....
H. C. Troy	do		23	100 00	.....
J. C. Wilson	do		23	50 00	.....
V. P. D. Lee	Agent and proofreader		23	.....	21 70
C. H. Cook	Veterinarian		23	5 00	.....
C. A. Wieting	Commissioner	March	1	333 33	41 67
G. L. Flanders	Assistant Commissioner		1	208 33	41 67
V. P. D. Lee	Agent and proofreader		1	125 00	.....
J. M. Hutchings	Agent		1	75 00	.....
G. B. Fellows	do		1	75 00	.....
H. F. Rossman	Stenographer		1	60 00	.....
G. L. Flanders	Assistant Commissioner		6	.....	565 04
F. J. Kracke	do		6	208 33	113 94
C. H. Allen	Agent		6	75 00	40 43
J. H. Bevier	do		6	75 00	59 51
Charles Burke	do		6	75 00	21 90
E. F. Burke	do		6	75 00	87 17
A. D. Clark	do		6	80 00	59 95
R. T. Courtney	do		6	60 00	14 78
J. M. Esmay	do		6	75 00	79 80
G. B. Fellows	do		6	.....	5 00
W. J. Gentes	do		6	80 00	71 71
J. McGuire	do		6	80 00	58 22

DETAILED STATEMENT, ETC.—(*Continued*).

NAME.	Position held.	Date.	Services.	Expenses.
		1899.		
M. T. Morgan	Agent	March 6	$100 00	$106 43
W. B. Mynderse	do	6	75 00	32 06
W. C. Patrick	do	6	80 00	94 24
Charles Sears	do	6	80 00	59 34
F. C. Slaughter	do	6	37 50	24 88
E. P. McKeefe	Chemist	6	50 00	.....
W. E. Walker	do	6	50 00	.....
John Arnold	Laborer	6	50 00	.....
John Evans	Clerk	6	50 00	.....
E. A. Dowd	Stenographer	6	60 00	.....
A. B. Rossman	do	6	33 33	36 56
W. H. Kelly	Veterinarian	6	30 00	10 67
H. S. Matteson	Agent	6	75 00	81 15
E. J .Wheeler	Chemist	6	216 66	29 20
V. C. Beebe	Assistant Commissioner	15	125 00	34 93
W. T. Hughes	do	15	125 00	26 26
T. James Owens	do	15	125 00	14 88
C. T. Russell	do	15	125 00	56 03
A. L. Twitchell	do	15	125 00	62 73
Geo. D. Babcock	Agent	15	75 00	28 34
W. J. Bennett	do	15	25 00	32 47
Geo. Bernhard	do	15	75 00	71 33
M. T. Cain	do	15	60 00	28 90

W. J. Corbett	do	15	75 00	13 50	
J. J. Coughlin	do	15	75 00	21 15	
J. R. Earl	do	15	75 00	17 56	
R. A. French	do	15	75 00	36 21	
M. Galligan	do	15	75 00	10 00	
W. W. Hall	do	15	100 00	42 82	
C. S. Kellogg	do	15	75 00	23 62	
A. M. Kibbe	do	15	75 00	64 89	
R. R. Kirkland	do	15	75 00	26 99	
J. E. Langdon	do	15	75 00	30 65	
R. McAdam	do	15	75 00	64 96	
C. J. Morganstern	do	15	75 00	31 98	
C. F. Nash	do	15	150 00	72 68	
J. M. Quigley	do	15	75 00	45 08	
W. B. Reading	do	15	75 00	15 85	
H. A. Rees	do	15	100 00	40 73	
M. S. Rivenburg	do	15	4 00	6 26	
J. W. Smith, 2d	do	15	60 00	68 52	
C. J. Standart	do	15	75 00	11 40	
N. Van Horne	do	15	75 00	44 82	
C. B. Wakefield	do	15	75 00	43 23	
C. A. Warren	do	15	75 00	18 59	
S. A. Lattimore	Chemist	15	47 50	.....	
John A. Miller	do	15	100 00	.....	
W. M. Smith	do	15	10 00	66	
H. C. Troy	do	15	100 00	3 40	
J. C. Wilson	do	15	50 00	.....	
J. P. Clark	Assistant Commissioner	15	125 00	47 80	
M. Dugan	Agent	15	2 75	4 64	

DETAILED STATEMENT, ETC.—(*Continued*).

NAME.	Position held.	Date.		Services.	Expenses.
		1899.			
J. E. Kruse	Agent	March	15	$75 00	$55 32
J. F. Geisler	Chemist		15	79 38	50
E. G. Love	do		15	118 75	2 50
C. A. Wieting	Commissioner	April	1	333 34	41 66
G. L. Flanders	Assistant Commissioner		1	208 34	41 66
V. P. D. Lee	Agent and proofreader		1	125 00	.....
J. M. Hutchings	Agent		1	75 00	.....
G. B. Fellows	do		1	75 00	.....
H. F. Rossman	Stenographer		1	60 00	.....
S. B. Richardson	Assistant Commissioner		5	125 00	43 41
C. H. Allen	Agent		5	75 00	24 87
Charles Burke	do		5	75 00	39 91
E. F. Burke	do		5	75 00	63 98
G. B. Fellows	do		5	.....	5 80
T. L. Hulburt	do		5	30 00	34 02
V. P. D. Lee	Agent and proofreader		5	.....	2 50
M. T. Morgan	Agent		5	100 00	74 21
W. B. Mynderse	do		5	75 00	29 22
John Evans	Clerk		5	50 00	2 05
E. P. McKeefe	Chemist		5	50 00	.....
E. J. Wheeler	do		5	216 66	11 90
W. E. Walker	do		5	50 00	.....
F. R. Eilinger	do		5	7 50	.....

John Arnold	Laborer	5	50 00	.....
E. A. Dowd	Stenographer	5	60 00	.....
A. B. Rossman	do	5	33 33	33 00
New York Stencil Works	Cheese brands	5	.....	35 55
F. J. Kracke	Assistant Commissioner	6	208 33	152 19
H. S. Matteson	Agent	8	75 00	55 27
G. L. Flanders	Assistant Commissioner	8	.....	260 04
V. C. Beebe	do	14	125 00	62 52
W. T. Hughes	do	14	125 00	36 96
T. James Owens	do	14	125 00	23 49
S. B. Richardson	do	14	125 00	50 61
C. T. Russell	do	14	125 00	48 53
A. L. Twitchell	do	14	125 00	65 07
Geo. Bernhard	Agent	14	75 00	63 64
J. H. Bevier	do	14	75 00	34 75
G. D. Babcock	do	14	75 00	43 85
M. T. Cain	do	14	60 00	22 74
E. A. Callahan	Special proofreader	14	270 00	12 50
A. D. Clark	Agent	14	80 00	53 01
W. J. Corbett	do	14	75 00	39 00
J. J. Coughlin	do	14	75 00	45 00
R. T. Courtney	do	14	60 00	23 50
A. S. Delano	do	14	75 00	11 78
J. R. Earl	do	14	75 00	12 40
J. M. Esmay	do	14	75 00	75 76
M. Galligan	do	14	75 00	11 95
W. J. Gentes	do	14	80 00	57 23
W. E. Griffith	do	14	13 80	25 20
W. W. Hall	do	14	100 00	70 71

DETAILED STATEMENT, ETC.—(*Continued*).

NAME.	Position held.	Date.	Services.	Expenses.
		1899.		
C. S. Kellogg	Agent	April 14	$75 00	$36 37
A. M. Kibbe	do	14	75 00	50 76
R. R. Kirkland	do	14	75 00	27 74
J. E. Kruse	do	14	75 00	53 56
J. E. Langdon	do	14	75 00	48 41
R. McAdam	do	14	75 00	55 49
J. McGuire	do	14	80 00	46 80
R. H. Palmer	do	14	54 00	39 66
W. C. Patrick	do	14	80 00	71 77
J. M. Quigley	do	14	75 00	60 93
W. B. Reading	do	14	57 50	10 90
H. A. Rees	do	14	100 00	48 49
M. S. Rivenburg	do	14	60 00	74 39
Charles Sears	do	14	80 00	58 39
F. C. Slaughter	do	14	75 00	23 16
J. W. Smith, 2d	do	14	60 00	78 08
C. J. Standart	do	14	75 00	21 30
N. Van Horne	do	14	75 00	38 34
C. A. Warren	do	14	75 00	17 73
J. F. Geisler	Chemist	14	188 74	50
S. A. Lattimore	do	14	20 00	.....
E. G. Love	do	14	145 00	2 25
John A. Miller	do	14	120 00	50

H. C. Troy	do		14	100 00	7 12
J. C. Wilson	do		14	50 00	.....
W. H. Kelly	Veterinarian		14	112 50	49 13
M. Quigley	do		14	500 00	64 56
W. J. Wadsworth	do		14	21 00	20 43
C. A. Wieting	Commissioner	May	1	333 33	41 67
G. L. Flanders	Assistant Commissioner		1	208 33	41 67
V. P. D. Lee	Agent and proofreader		1	125 00	.....
J. M. Hutchings	Agent		1	75 00	.....
G. B. Fellows	do		1	75 00	.....
H. F. Rossman	Stenographer		1	60 00	.....
James P. Clark	Assistant Commissioner		4	125 00	69 31
G. L. Flanders	do		4	.....	503 98
F. J. Kracke	do		4	208 33	106 72
C. H. Allen	Agent		4	75 00	15 62
J. H. Bevier	do		4	75 00	49 10
Charles Burke	do		4	75 00	40 02
E. F. Burke	do		4	75 00	62 44
A. D. Clark	do		4	80 00	43 85
R. T. Courtney	do		4	60 00	83 49
J. M. Esmay	do		4	75 00	74 01
G. B. Fellows	do		4	.....	9 49
W. J. Gentes	do		4	80 00	44 97
T. L. Hulburt	do		4	45 00	62 10
J. McGuire	do		4	80 00	52 25
H. S. Matteson	do		4	75 00	108 60
C. J. Morganstern	do		4	75 00	51 98
W. B. Mynderse	do		4	75 00	31 07
W. C. Patrick	do		4	80 00	65 30

DETAILED STATEMENT, ETC.—(*Continued*).

NAME.	Position held.	Date.	Services.	Expenses.
		1899.		
C. B. Wakefield	Agent	May 4	$75 00	$58 65
A. L. Haines	Bacteriologist	4	100 00	36 63
John Evans	Clerk	4	50 00	.....
V. P. D. Lee	Agent and proofreader	4	.....	17 40
E. P. McKeefe	Chemist	4	50 00	.....
E. J. Wheeler	do	4	216 66	36 77
John Arnold	Laborer	4	50 00	.....
E. A. Dowd	Stenographer	4	60 00	.....
A. B. Rossman	do	4	33 33	.....
W. H. Kelly	Veterinarian	4	82 50	27 22
New York Stencil Works	Cheese brands	4	.....	37 10
E. J. Preston	Assistant Commissioner	4	87 50	50 49
V. C. Beebe	do	17	125 00	24 07
James P. Clark	do	17	125 00	32 76
Wm. T. Hughes	do	17	125 00	21 97
T. James Owens	do	17	125 00	17 72
S. B. Richardson	do	17	125 00	38 44
C. T. Russell	do	17	125 00	54 06
A. L. Twitchell	do	17	125 00	57 10
Geo. D. Babcock	Agent	17	75 00	32 60
W. J. Bennett	do	17	50 00	60 55
Geo. Bernhard	do	17	75 00	55 03
M. T. Cain	do	17	60 00	35 96

W. J. Corbett	do	17	75	00	20 20
J. J. Coughlin	do	17	75	00	54 65
A. S. Delano	do	17	75	00	17 28
M. Dugan	do	17	46	14	37 72
J. R. Earl	do	17	75	00	22 74
R. A. French	do	17	150	00	107 97
M. Galligan	do	17	75	00	11 72
W. E. Griffith	do	17	75	00	23 85
W. W. Hall	do	17	100	00	62 24
T. L. Hulburt	do	17	50	00	78 42
C. S. Kellogg	do	17	75	00	44 20
A. M. Kibbe	do	17	75	00	68 27
J. E. Kruse	do	17	75	00	54 98
W. B. Reading	do	17	27	50	7 65
J. E. Langdon	do	17	75	00	26 26
R. McAdam	do	17	75	00	62 57
M. T. Morgan	do	17	100	00	120 46
C. J. Morganstern	do	17	75	00	55 59
R. H. Palmer	do	17	75	00	75 51
J. M. Quigley	do	17	75	00	32 26
H. A. Rees	do	17	100	00	40 64
Charles Sears	do	17	80	00	55 85
F. C. Slaughter	do	17	75	00	73 63
John W. Smith, 2d	do	17	60	00	54 47
C. J. Standart	do	17	75	00	33 30
L. D. Spink	do	17	30	00	15 27
N. Van Horne	do	17	75	00	44 34
C. B. Wakefield	do	17	75	00	39 73
C. A. Warren	do	17	75	00	26 61

DETAILED STATEMENT, ETC.—(*Continued*).

NAME.	Position held.	Date.		Services.	Expenses.
		1899.			
Frank Wieting	Agent	May	17	$60 00	$37 88
Theo. Deecke	Chemist		17	35 00	1 35
J. F. Geisler	do		17	130 87	1 00
S. A. Lattimore	do		17	20 00	.....
E. G. Love	do		17	108 00	.....
John A. Miller	do		17	100 00	.....
H. C. Troy	do		17	100 00	3 05
J. C. Wilson	do		17	50 00	.....
C. H. Cook	Veterinarian		17	15 00	.....
C. A. Wieting	Commissioner	June	1	333 33	.....
G. L. Flanders	Assistant Commissioner		1	208 33	.....
E. J. Wheeler	Chemist		1	216 66	.....
V. P. D. Lee	Agent and proofreader		1	125 00	.....
E. F. Burke	Agent		1	100 00	.....
A. L. Haines	Bacteriologist		1	100 00	.....
C. H. Allen	Agent		1	75 00	.....
Charles Burke	do		1	75 00	.....
G. B. Fellows	do		1	75 00	.....
J. M. Hutchings	do		1	75 00	.....
H. S. Matteson	do		1	75 00	.....
W. B. Mynderse	do		1	75 00	.....
R. T. Courtney	do		1	60 00	.....
M. Schifferdecker	do		1	60 00	.....

Frank Wieting	do	1	60 00	.....
E. P. McKeefe	Chemist	1	50 00	.....
W. E. Walker	do	1	50 00	.....
John Evans	Clerk	1	50 00	.....
C. S. Arnold	Laborer	1	50 00	.....
E. A. Dowd	Stenographer	1	60 00	.....
H. F. Rossman	do	1	60 00	.....
A. B. Rossman	do	1	33 33	.....
W. H. Kelly	Veterinarian	1	150 00	.....
A. B. Kelly	do	1	60 00	.....
Charles Schadler	Laborer	1	10 50	.....
Wm. T. Hughes	Assistant Commissioner	1	125 00	.....
Geo. Bernhard	Agent	1	75 00	.....
J. E. Langdon	do	1	75 00	.....
J. M. Quigley	do	1	75 00	.....
J. W. Smith, 2d	do	1	60 00	.....
A. L. Twitchell	Assistant Commissioner	1	125 00	.....
J. J. Coughlin	Agent	1	75 00	.....
A. S. Delano	do	1	75 00	.....
J. R. Earl	do	1	75 00	.....
M. Galligan	do	1	75 00	.....
W. B. Reading	do	1	75 00	.....
C. J. Standart	do	1	75 00	.....
C. A. Warren	do	1	75 00	.....
John A. Miller	Chemist	1	100 00	.....
F. J. Kracke	Assistant Commissioner	1	208 33	.....
A. D. Clark	Agent	1	80 00	.....
Charles Sears	do	1	80 00	.....
W. J. Gentes	do	1	80 00	.....

DETAILED STATEMENT, ETC.—(*Continued*).

NAME.	Position held.	Date.		Services.	Expenses.
		1899.			
J. McGuire	Agent	June	1	$80 00	.....
W. C. Patrick	do		1	80 00	.....
J. M. Esmay	do		1	75 00	.....
J. H. Bevier	do		1	75 00	.....
G. L. Flanders	Assistant Commissioner		2	.....	$41 67
C. A. Wieting	Commissioner		2	.....	41 67
R. R. Kirkland	Agent		5	75 00	22 77
M. S. Rivenburg	do		5	60 00	89 79
P. C. McIlhiney	Chemist		5	132 00	.....
W. E. Walker	do		5	50 00	.....
G. L. Flanders	Assistant Commissioner		6	.....	428 21
C. H. Allen	Agent		6	.....	20 05
H. S. Matteson	do		6	.....	103 13
M. T. Morgan	do		6	.....	83 39
W. B. Mynderse	do		6	.....	35 01
M. Schifferdecker	do		6	.....	46 20
Geo. A. Smith	do		6	.....	22 36
C. S. Arnold	Laborer		6	.....	9 45
W. H. Kelly	Veterinarian		6	.....	59 54
New York Stencil Works	Cheese brands		6	.....	37 25
V. C. Beebe	Assistant Commissioner		8	125 00	.....
R. A. French	Agent		8	75 00	.....
C. J. Morganstern	do		8	75 00	.....

L. D. Spink	do	8	60 00	.....
M. T. Cain	do	8	60 00	.....
C. T. Russell	Assistant Commissioner	8	125 00	.....
A. M. Kibbe	Agent	8	75 00	.....
H. C. Troy	Chemist	8	100 00	.....
W. M. Smith	do	8	10 00	.....
T. James Owens	Assistant Commissioner	8	125 00	.....
Geo. D. Babcock	Agent	8	75 00	.....
R. McAdam	do	8	75 00	.....
N. Van Horne	do	8	75 00	.....
Theo. Deecke	Chemist	8	45 00	.....
M. T. Morgan	Agent	8	100 00	.....
J. P. Clark	Assistant Commissioner	15	125 00	.....
W. J. Corbett	Agent	15	75 00	.....
J. E. Kruse	do	15	75 00	.....
C. B. Wakefield	do	15	75 00	.....
J. F. Geisler	Chemist	15	141 50	.....
E. G. Love	do	15	116 75	.....
S. B. Richardson	Assistant Commissioner	15	125 00	.....
W. E. Griffith	do	15	75 00	.....
C. S. Kellogg	Agent	15	75 00	.....
R. R. Kirkland	do	15	75 00	.....
W. W. Hall	do	15	100 00	.....
H. A. Rees	do	15	100 00	.....
J. C. Wilson	Chemist	15	50 00	.....
E. J. Preston	Assistant Commissioner	15	125 00	.....
W. J. Bennett	Agent	15	75 00	.....
M. Dugan	do	15	75 00	.....
R. H. Palmer	do	15	75 00	.....

DETAILED STATEMENT, ETC.—(*Continued*).

NAME.	Position held.	Date.	Service.	Expenses.
		1899.		
F. C. Slaughter	Agent	June 15	$75 00	.....
M. S. Rivenburg	do	15	60 00	.....
H. B. Ambler	Veterinarian	15	45 00	.....
G. L. Flanders	Assistant Commissioner	15	104 17	$20 83
G. L. Flanders	do	16	.....	143 61
V. C. Beebe	do	20	.....	46 03
W. T. Hughes	do	20	.....	39 69
F. J. Kracke	do	20	.....	102 03
T. James Owens	do	20	.....	24 77
E. J. Preston	do	20	.....	68 08
S. B. Richardson	do	20	.....	63 77
C. T. Russell	do	20	.....	62 37
A. L. Twitchell	do	20	.....	81 86
Geo. D. Babcock	Agent	20	.....	54 01
W. J. Bennett	do	20	.....	79 53
Geo. Bernhard	do	20	.....	69 77
J. H. Bevier	do	20	.....	51 35
Charles Burke	do	20	.....	46 00
M. T. Cain	do	20	.....	29 28
A. D. Clark	do	20	.....	59 62
W. J. Corbett	do	20	.....	30 56
J. J. Coughlin	do	20	.....	52 99
R. T. Courtney	do	20	.....	71 68

A. S. Delano	do	do	20	.....	23 08
M. Dugan	do	do	20	.....	64 12
J. R. Earl	do	do	20	.....	21 88
J. M. Esmay	do	do	20	.....	66 80
G. B. Fellows	do	do	20	.....	15 35
R. A. French	do	do	20	.....	41 93
M. Galligan	do	do	20	.....	19 45
W. J. Gentes	do	do	20	.....	50 10
W. E. Griffith	do	do	20	.....	59 47
C. S. Kellogg	do	do	20	.....	61 71
A. M. Kibbe	do	do	20	.....	103 83
R. R. Kirkland	do	do	20	.....	71 25
J. E. Kruse	do	do	20	.....	78 85
J. E. Langdon	do	do	20	.....	35 56
R. McAdam	do	do	20	.....	76 77
J. McGuire	do	do	20	.....	53 55
C. J. Morganstern	do	do	20	.....	56 68
R. H. Palmer	do	do	20	.....	70 02
W. C. Patrick	do	do	20	.....	68 70
J. M. Quigley	do	do	20	.....	46 44
W. B. Reading	do	do	20	.....	20 52
H. A. Rees	do	do	20	.....	106 06
M. S. Rivenburg	do	do	20	.....	91 38
Charles Sears	do	do	20	.....	59 11
F. C. Slaughter	do	do	20	.....	76 22
J. W. Smith, 2d	do	do	20	.....	63 66
L. D. Spink	do	do	20	.....	23 61
C. J. Standart	do	do	20	.....	24 90
C. B. Wakefield	do	do	20	.....	71 17

DETAILED STATEMENT, ETC.—(*Continued*).

NAME.	Position held.	Date.		Services.	Expenses.
		1899.			
C. A. Warren	Agent	June	20	.....	$24 98
A. L. Haines	do		20	.....	36 22
H. C. Troy	do		20	.....	28 61
H. B. Ambler	Veterinarian.		20	.....	18 15
A. B. Kelly	do		20	.....	8 10
J. P. Clark	Assistant Commissioner		20	.....	31 52
S. A. Lattimore	Chemist		20	$25 00	.....
C. H. Cook	Veterinarian		20	25 00	.....
W. W. Hall	Agent		22	.....	68 26
Frank Wieting	do		22	.....	52 94
C. A. Wieting	Commissioner	July	1	333 33	41 67
F. J. Kracke	Assistant Commissioner		1	208 33	.....
V. C. Beebe	do		1	125 00	.....
J. P. Clark	do		1	125 00	.....
W. T. Hughes	do		1	125 00	.....
T. James Owens	do		1	125 00	.....
E. J. Preston	do		1	125 00	.....
S. B. Richardson	do		1	125 00	.....
C. T. Russell	do		1	125 00	.....
A. L. Twitchell	do		1	125 00	.....
E. J. Wheeler	Chemist		1	216 66	.....
V. P. D. Lee	Agent and proofreader		1	150 00	.....
John A. Miller	Chemist		1	100 00	.....

H. C. Troy	do	1	100 00	.....
E. F. Burke	Agent	1	100 00	.....
A. L. Haines	Bacteriologist	1	100 00	.....
M. T. Morgan	Agent	1	100 00	.....
H. A. Rees	do	1	100 00	.....
R. McAdam	do	1	92 50	.....
C. H. Allen	do	1	75 00	.....
Geo. D. Babcock	do	1	75 00	.....
W. J. Bennett	do	1	75 00	.....
Geo. Bernhard	do	1	75 00	.....
J. H. Bevier	do	1	75 00	.....
Charles Burke	do	1	75 00	.....
A. D. Clark	do	1	80 00	.....
W. J. Corbett	do	1	75 00	.....
J. J. Coughlin	do	1	75 00	.....
M. Dugan	do	1	75 00	.....
J. R. Earl	do	1	75 00	.....
J. M. Esmay	do	1	75 00	.....
G. B. Fellows	do	1	75 00	.....
R. A. French	do	1	75 00	.....
M. Galligan	do	1	75 00	.....
W. J. Gentes	do	1	80 00	.....
W. E. Griffith	do	1	75 00	.....
J. M. Hutchings	do	1	75 00	.....
C. S. Kellogg	do	1	75 00	.....
A. M. Kibbe	do	1	75 00	.....
R. R. Kirkland	do	1	75 00	.....
J. E. Kruse	do	1	75 00	.....
J. E. Langdon	do	1	75 00	.....

DETAILED STATEMENT, ETC.—(*Continued*).

NAME.	Position held.	Date.		Services.	Expenses.
		1899.			
J. McGuire	Agent	July	1	$80 00	.....
H. S. Matteson	do		1	75 00	.....
C. J. Morganstern	do		1	45 00	.....
W. B. Mynderse	do		1	75 00	.....
R. H. Palmer	do		1	75 00	.....
W. C. Patrick	do		1	80 00	.....
J. M. Quigley	do		1	75 00	.....
W. B. Reading	do		1	75 00	.....
Charles Sears	do		1	80 00	.....
F. C. Slaughter	do		1	75 00	.....
L. D. Spink	do		1	60 00	.....
C. J. Standart	do		1	75 00	.....
N. Van Horne	do		1	75 00	.....
C. B. Wakefield	do		1	75 00	.....
C. A. Warren	do		1	75 00	.....
M. Schifferdecker	do		1	60 00	.....
E. A. Dowd	Stenographer		1	60 00	.....
H. F. Rossman	do		1	60 00	.....
A. B. Rossman	do		1	50 00	.....
John Evans	Clerk		1	50 00	.....
E. P. McKeefe	Chemist		1	50 00	.....
W. E. Walker	do		1	50 00	.....
J. C. Wilson	do		1	50 00	.....

C. S. Arnold	Laborer	1	50 00	.....
M. Quigley	Veterinarian	1	500 00	.....
G. L. Flanders	Assistant Commissioner	1	104 17	$20 30
Theo. Deecke	Chemist	11	20 00	.....
W. H. Kelly	Veterinarian	11	112 50	.....
V. A. Moore	Bacteriologist	11	20 00	.....
H. B. Ambler	Veterinarian	11	22 50	.....
S. A. Lattimore	Chemist	13	55 00	.....
G. L. Flanders	Assistant Commissioner	15	.....	407 02
H. S. Matteson	Agent	18	.....	98 75
A. L. Haines	Bacteriologist	18	.....	34 42
T. L. Hulburt	Agent	13	44 00	.....
V. C. Beebe	do	19	.....	57 97
J. P. Clark	Assistant Commissioner	19	.....	49 66
W. T. Hughes	do	19	.....	22 30
F. J. Kracke	do	19	.....	191 60
T. James Owens	Agent	19	.....	12 88
E. J. Preston	Assistant Commissioner	19	.....	65 37
S. B. Richardson	do	19	.....	52 36
C. T. Russell	do	19	.....	48 42
A. L. Twitchell	do	19	.....	66 42
C. H. Allen	Agent	19	.....	22 01
H. B. Ambler	Veterinarian	19	.....	12 47
C. S. Arnold	Laborer	19	.....	9 07
Geo. D. Babcock	Agent	19	.....	60 18
W. J. Bennett	do	19	.....	85 66
Geo. Bernhard	do	19	.....	79 81
J. H. Bevier	do	19	.....	56 35
Charles Burke	do	19	.....	34 30

DETAILED STATEMENT, ETC.—(*Continued*).

NAME.	Position held.	Date.	Services.	Expenses.
		1899.		
E. F. Burke	Agent	July 19	.....	$64 53
A. D. Clark	do	19	.....	59 33
W. J. Corbett	do	19	.....	62 39
J. J. Coughlin	do	19	.....	52 13
Theo. Deecke	do	19	.....	30
M. Dugan	do	19	.....	69 74
J. R. Earle	do	19	.....	24 18
J. M. Esmay	do	19	.....	74 98
G. B. Fellows	do	19	.....	11 80
R. A. French	do	19	.....	46 21
M. Galligan	do	19	.....	14 65
W. J. Gentes	do	19	.....	56 35
W. E. Griffith	do	19	.....	82 89
T. L. Hulburt	do	19	.....	93 56
J. M. Hutchings	do	19	.....	7 58
C. S. Kellogg	do	19	.....	72 66
W. H. Kelly	Veterinarian	19	.....	71 49
R. R. Kirkland	Agent	19	.....	99 05
A. M. Kibbe	do	19	.....	97 35
J. E. Kruse	do	19	.....	86 31
J. E. Langdon	do	19	.....	46 54
E. G. Love	Chemist	19	.....	8 75
R. McAdam	Agent	19	.....	71 86

J. McGuire	do		19	$68 37	.....
V. A. Moore	Bacteriologist		19	.....	18 17
M. T. Morgan	Agent		19	.....	96 62
C. J. Morganstern	do		19	.....	12 68
W. B. Mynderse	do		19	.....	48 88
R. H. Palmer	do		19	.....	97 94
W. C. Patrick	do		19	.....	47 28
J. M. Quigley	do		19	.....	48 01
M. Quigley	Veterinarian		19	.....	4 14
H. A. Rees	Agent		19	.....	100 60
Charles Sears	do		19	.....	62 38
M. Schifferdecker	do		19	.....	78 90
F. C. Slaughter	do		19	.....	79 90
G. A. Smith	do		19	.....	35 44
L. D. Spink	do		19	.....	47 53
C. J. Standart	do		19	.....	90 12
H. C. Troy	Chemist		19	.....	13 52
N. Van Horne	Agent		19	.....	101 27
C. B. Wakefield	do		19	.....	89 59
C. A. Warren	do		19	.....	31 42
J. F. Geisler	Chemist		13	68 37	.....
E. G. Love	do		13	396 00	.....
C. A. Wieting	Commissioner	August	1	333 33	41 67
F. J. Kracke	Assistant Commissioner		1	208 33	.....
V. C. Beebe	do		1	125 00	.....
J. P. Clark	do		1	125 00	.....
W. T. Hughes	do		1	125 00	.....
T. James Owens	do		1	125 00	.....
E. J. Preston	do		1	125 00	.....

DETAILED STATEMENT, ETC.—(*Continued*).

NAME.	Position held.	Date.	Services.	Expenses.
		1899.		
S. B. Richardson	Assistant Commissioner	August 1	$125 00	.....
C. T. Russell	do	1	125 00	.....
A. L. Twitchell	do	1	125 00	.....
E. J. Wheeler	Chemist	1	216 66	.....
V. P. D. Lee	Agent and proofreader	1	150 00	.....
John A. Miller	Chemist	1	100 00	.....
H. C. Troy	do	1	100 00	.....
E. F. Burke	Agent	1	100 00	.....
A. L. Haines	Bacteriologist	1	50 00	.....
M. T. Morgan	Agent	1	100 00	.....
R. McAdam	do	1	100 00	.....
C. H. Allen	do	1	75 00	.....
Geo. D. Babcock	do	1	75 00	.....
W. J. Bennett	do	1	75 00	.....
Geo. Bernhard	do	1	75 00	.....
J. H. Bevier	do	1	75 00	.....
Charles Burke	do	1	75 00	.....
A. D. Clark	do	1	80 00	.....
W. J. Corbett	do	1	75 00	.....
J. J. Coughlin	do	1	75 00	.....
M. Dugan	do	1	75 00	.....
J. R. Earl	do	1	75 00	.....
J. M. Esmay	do	1	75 00	.....

G. B. Fellows	do	1	75	00	.....
R. A. French	do	1	75	00	.....
M. Galligan	do	1	75	00	.....
W. J. Gentes	do	1	75	00	.....
J. M. Hutchings	do	1	75	00	.....
C. S. Kellogg	do	1	75	00	.....
A. M. Kibbe	do	1	75	00	.....
J. E. Kruse	do	1	75	00	.....
J. E. Langdon	do	1	75	00	.....
J. McGuire	do	1	80	00	.....
H. S. Matteson	do	1	75	00	.....
C. J. Morganstern	do	1	35	00	.....
W. B. Mynderse	do	1	75	00	.....
R. H. Palmer	do	1	75	00	.....
W. C. Patrick	do	1	80	00	.....
J. M. Quigley	do	1	75	00	.....
W. B. Reading	do	1	75	00	.....
Charles Sears	do	1	80	00	.....
F. C. Slaughter	do	1	35	00	.....
L. D. Spink	do	1	60	00	.....
C. J. Standart	do	1	75	00	.....
N. Van Horne	do	1	75	00	.....
C. B. Wakefield	do	1	75	00	.....
C. A. Warren	do	1	37	50	.....
M. Schifferdecker	do	1	60	00	.....
E. A. Dowd	Stenographer	1	60	00	.....
H. F. Rossman	do	1	60	00	.....
A. B. Rossman	do	1	50	00	.....
John Evans	Clerk	1	50	00	.....

DETAILED STATEMENT, ETC.—(*Continued*).

NAME.	Position held.	Date.		Services.	Expenses.
		1899.			
E. P. McKeefe	Chemist	August	1	$50 00	.....
W. E. Walker	do		1	50 00	.....
J. C. Wilson	do		1	50 00	.....
C. S. Arnold	Laborer		1	50 00	.....
N. D. West	Bee Inspector		1	40 00	.....
G. L. Flanders	Assistant Commissioner		1	208 33	$41 67
R. R. Kirkland	Agent		1	75 00	.....
H. A. Rees	do		1	100 00	.....
W. E. Griffith	do		1	75 00	.....
G. L. Flanders	Assistant Commissioner		7	.....	78 00
C. E. Argersinger	Postage stamps		7	.....	100 00
W. T. Hughes	Assistant Commissioner		8	.....	30 36
C. H. Allen	Agent		8	.....	7 57
Geo. Bernhard	do		8	.....	90 16
E. F. Burke	do		8	.....	70 87
G. B. Fellows	do		8	.....	9 15
J. E. Langdon	do		8	.....	58 34
J. M. Quigley	do		8	.....	50 70
H. S. Matteson	do		8	.....	83 38
M. T. Morgan	do		8	.....	107 23
W. B. Mynderse	do		8	.....	68 07
W. B. Reading	do		8	.....	40 65
M. Schifferdecker	do		8	.....	62 93

G. A. Smith	do	8	.....	18	62
N. Van Horne	do	8	.....	98	71
A. L. Haines	Bacteriologist	8	.....	4	76
N. D. West	Bee Inspector	8	.....	28	63
E. J. Wheeler	Chemist	8	.....	64	20
W. E. Walker	do	8	.....	1	53
C. S. Arnold	Laborer	8	.....	6	30
Melvin Hotaling	do	8	.....	20	60
W. H. Kelly	Veterinarian	8	.....	77	91
Neal & Hyde	Supplies	9	.....	6	75
American Express Co	Expressage	9	.....	28	30
National Express Co	do	9	.....	32	65
National Press Intel. Co	Newspaper clippings	9	.....	1	85
Hudson River Tel. Co	Telephone, etc	9	.....	13	49
Western Union Tel. Co.	Messages	9	.....	1	65
Postal Tel. Cable Co	do	9	.....		25
H. D. Keefer	Supplies	9	.....	6	00
Albany H. & I. Co	do	9	.....		25
E. De L. Palmer	Rent	9	.....	15	00
Jeremiah Chase	Expressage	9	.....	9	30
Brandow Printing Co.	Printing	9	.....	61	73
W. H. Kelly	Veterinarian	15	120 00	.....	
S. A. Lattimore	Chemist	15	65 00	.....	
Charles H. Cook	Veterinarian	15	25 00	.....	
J. F. Geisler	Chemist	15	137 95	.....	
E. G. Love	do	15	171 00	.....	
V. C. Beebe	Assistant Commissioner	21	.....	55	81
F. J. Kracke	do	21	.....	72	98
T. James Owens	do	21	.....	49	16

DETAILED STATEMENT, ETC.—(*Continued*).

NAME.	Position held.	Date.	Services.	Expenses.
		1899.		
E. J. Preston	Assistant Commissioner	August 21	.....	$70 90
S. B. Richardson	do	21	.....	58 89
C. T. Russell	do	21	.....	29 80
A. L. Twitchell	do	21	.....	76 62
W. J. Bennett	Agent	21	.....	86 77
Charles Burke	do	21	.....	35 60
A. D. Clark	do	21	.....	51 70
W. J. Corbett	do	21	.....	81 29
J. J. Coughlin	do	21	.....	32 45
M. Dugan	do	21	.....	69 50
J. R. Earl	do	21	.....	16 88
J. M. Esmay	do	21	.....	68 60
R. A. French	do	21	.....	62 55
M. Galligan	do	21	.....	16 70
W. J. Gentes	do	21	.....	56 70
W. E. Griffith	do	21	.....	116 07
C. S. Kellogg	do	21	.....	52 35
A. M. Kibbe	do	21	.....	68 61
R. R. Kirkland	do	21	.....	85 24
J. E. Kruse	do	21	.....	76 44
R. McAdam	do	21	.....	73 27
J. McGuire	do	21	.....	53 10
C. J. Morganstern	do	21	.....	33 37

R. H. Palmer	do			21	.....	84 65
W. C. Patrick	do			21	.....	66 60
W. B. Reading	do			21	.....	18 82
H. A. Rees	do			21	.....	87 24
Charles Sears	do			21	.....	57 56
F. C. Slaughter	do			21	.....	30 91
L. D. Spink	do			21	.....	51 57
C. J. Standart	do			21	.....	83 71
N. Van Horne	do			21	.....	76 02
C. B. Wakefield	do			21	.....	70 15
C. A. Warren	do			21	.....	19 12
Theo. Deecke	Chemist			21	.....	24
J. F. Geisler	do			21	.....	3 38
W. M. Smith	do			21	.....	1 54
H. C. Troy	do			21	.....	13 76
V. P. D. Lee	Agent and proofreader			21	.....	13 60
James P. Clark	Assistant Commissioner			23	.....	83 55
Geo. D. Babcock	Agent			23	.....	68 28
J. H. Bevier	do			23	.....	76 81
C. A. Wieting	Commissioner		September	1	$333 33	41 67
G. L. Flanders	Assistant Commissioner			1	208 33	41 67
F. J. Kracke	do			1	208 33	.....
V. C. Beebe	do			1	125 00	.....
W. T. Hughes	do			1	125 00	.....
T. James Owens	do			1	125 00	.....
E. J. Preston	do			1	125 00	.....
S. B. Richardson	do			1	125 00	.....
C. T. Russell	do			1	125 00	.....
A. L. Twitchell	do			1	125 00	.....

DETAILED STATEMENT, ETC.—(*Continued*).

NAME.	Position held.	Date.	Services.	Expenses.
		1899.		
E. J. Wheeler	Chemist	September 1	$216 66	.....
V. P. D. Lee	Agent and proofreader	1	150 00	.....
John A. Miller	Chemist	1	100 00	.....
H. C. Troy	do	1	100 00	.....
E. F. Burke	Agent	1	100 00	.....
M. T. Morgan	do	1	100 00	.....
H. A. Rees	do	1	100 00	.....
R. McAdam	do	1	100 00	.....
C. H. Allen	do	1	75 00	.....
Geo. D. Babcock	do	1	75 00	.....
W. J. Bennett	do	1	75 00	.....
Geo. Bernhard	do	1	75 00	.....
J. H. Bevier	do	1	75 00	.....
Charles Burke	do	1	75 00	.....
A. D. Clark	do	1	80 00	.....
W. J. Corbett	do	1	75 00	.....
J. J. Coughlin	do	1	75 00	.....
M. Dugan	do	1	75 00	.....
J. R. Earl	do	1	37 50	.....
J. M. Esmay	do	1	75 00	.....
G. B. Fellows	do	1	75 00	.....
R. A. French	do	1	75 00	.....
M. Galligan	do	1	75 00	.....

W. J. Gentes	do	1	85 00	.....
W. E. Griffith	do	1	75 00	.....
J. M. Hutchings	do	1	75 00	.....
C. S. Kellogg	do	1	75 00	.....
A. M. Kibbe	do	1	75 00	.....
R. R. Kirkland	do	1	75 00	.....
J. E. Kruse	do	1	75 00	.....
J. E. Langdon	do	1	75 00	.....
J. McGuire	do	1	80 00	.....
H. S. Matteson	do	1	75 00	.....
C. J. Morganstern	do	1	75 00	.....
W. B. Mynderse	do	1	75 00	.....
R. H. Palmer	do	1	75 00	.....
W. C. Patrick	do	1	80 00	.....
J. M. Quigley	do	1	75 00	.....
W. B. Reading	do	1	75 00	.....
Charles Sears	do	1	80 00	.....
L. D. Spink	do	1	75 00	.....
C. J. Standart	do	1	75 00	.....
N. Van Horne	do	1	75 00	.....
C. B. Wakefield	do	1	75 00	.....
C. A. Warren	do	1	75 00	.....
M. Schifferdecker	do	1	60 00	.....
E. A. Dowd	Stenographer	1	60 00	.....
H. F. Rossman	do	1	60 00	.....
A. B. Rossman	do	1	50 00	.....
John Evans	Clerk	1	50 00	.....
E. P. McKeefe	Chemist	1	50 00	.....
W. E. Walker	do	1	50 00	.....

DETAILED STATEMENT, ETC.—(*Continued*).

NAME.	Position held.	Date.	Services.	Expenses.
		1899.		
J. C. Wilson	Chemist	September 1	$50 00	.....
C. S. Arnold	Laborer	1	50 00	.....
N. D. West	Bee inspector	1	60 00	.....
W. M. Smith	Chemist	1	30 00	.....
Anderson Crowforth	Veterinarian	1	24 00	.....
Theo. Deecke	Chemist	1	40 00	.....
G. L. Flanders	Assistant Commissioner	12	.....	$81 00
National Pre. Intel. Co.	Press clippings	12	.....	5 40
E. DeL. Palmer	Rent	12	.....	15 00
H. W. Riggs	Supplies	12	.....	15 15
Walker & Gibson	do	12	.....	33 32
J. & J. Doran	Purchases	12	.....	2 00
United States Express Co.	Expressage	12	.....	92 41
Great Bear Spring Co.	Water	12	.....	6 60
Municipal Gas Co.	Gas	12	.....	7 35
Hudson River Telephone Co.	Telephone, etc.	12	.....	17 49
Western Union Telegraph Co.	Messages	12	.....	5 97
Postal Telegraph Cable Co.	do	12	.....	99
H. S. Matteson	Agent	14	.....	114 77
H. S. Ambler	Ex-Assistant Commissioner	15	.....	90 55
V. C. Beebe	Assistant Commissioner	15	.....	64 36
J. P. Clark	do	15	.....	64 44
W. T. Hughes	do	15	.....	38 04

F. J. Kracke	do	do	15	.....	59 12
T. James Owens	do	do	15	.....	16 00
S. B. Richardson	do	do	15	.....	58 35
C. T. Russell	do	do	15	.....	47 61
C. H. Allen	Agent		15	.....	12 53
Geo. D. Babcock	do		15	.....	86 94
Geo. Bernhard	do		15	.....	84 82
Charles Burke	do		15	.....	56 19
E. F. Burke	do		15	.....	75 15
A. D. Clark	do		15	.....	57 32
W. J. Corbett	do		15	.....	94 72
J. M. Esmay	do		15	.....	65 05
G. B. Fellows	do		15	.....	18 93
R. A. French	do		15	.....	63 51
W. J. Gentes	do		15	.....	35 20
W. E. Griffith	do		15	.....	119 50
J. M. Hutchings	do		15	.....	1 40
C. S. Kellogg	do		15	.....	69 23
A. M. Kibbe	do		15	.....	84 00
R. R. Kirkland	do		15	.....	104 96
J. E. Langdon	do		15	.....	53 63
R. McAdam	do		15	.....	89 52
J. McGuire	do		15	.....	44 15
M. T. Morgan	do		15	.....	109 14
C. J. Morganstern	do		15	.....	46 29
W. B. Mynderse	do		15	.....	36 51
W. C. Patrick	do		15	.....	67 00
J. M. Quigley	do		15	.....	45 28
Charles Sears	do		15	.....	47 71

DETAILED STATEMENT, ETC.—(*Continued*).

NAME.	Position held.	Date.	Services.	Expenses.
		1899.		
L. D. Spink	Agent	September 15	.....	$74 31
C. J. Standart	do	15	.....	94 41
N. Van Horne	do	15	.....	92 30
C. B. Wakefield	do	15	.....	114 39
N. D. West	Bee inspector	15	.....	41 30
M. Schifferdecker	Agent	15	.....	27 30
J. Van Gelderen	do	15	.....	40 60
Theo. Deecke	Chemist	15	.....	32
E. P. McKeefe	do	15	.....	2 36
W. M. Smith	do	15	.....	2 92
H. C. Troy	do	15	.....	17 75
E. P. Van Denburgh	do	15	.....	6 26
W. E. Walker	do	15	.....	14 43
John Evans	Clerk	15	.....	6 62
V. P. D. Lee	Agent and proofreader	15	.....	21 05
C. S. Arnold	Laborer	15	.....	11 60
W. H. Kelly	Veterinarian	15	.....	80 34
James P. Clark	Assistant Commissioner	1	$125 00	.....
John Ferris, Jr.	Supplies	12	.....	65
E. F. Burke	Agent	20	100 00	.....
Theo. Deecke	Chemist	20	50 00	.....
F. R. Eilinger	do	20	40 00	.....
S. A. Lattimore	do	20	75 00	.....

John A. Miller	do	20	30 00	.....
W. M. Smith	do	20	60 00	.....
E. J. Wheeler	do	20	5 00	.....
C. H. Cook	Veterinarian	20	5 00	.....
W. H. Kelly	do	20	112 50	.....
J. F. Geisler	Chemist	20	114 00	.....
E. G. Love	do	20	28 50	.....
C. A. Wieting	Commissioner	25	333 33	41 67
G. L. Flanders	Assistant Commissioner	25	208 33	41 67
F. J. Kracke	do	25	208 33	.....
V. C. Beebe	do	25	125 00	.....
J. P. Clark	do	25	125 00	.....
W. T. Hughes	do	25	125 00	.....
T. James Owens	do	25	125 00	.....
E. J. Preston	do	25	125 00	.....
S. B. Richardson	do	25	125 00	.....
C. T. Russell	do	25	125 00	.....
A. L. Twitchell	do	25	125 00	.....
E. J. Wheeler	Chemist	25	216 66	.....
V. P. D. Lee	Agent and proofreader	25	150 00	.....
John A. Miller	Chemist	25	100 00	.....
H. C. Troy	do	25	100 00	.....
M. T. Morgan	Agent	25	100 00	.....
H. A. Rees	do	25	75 00	.....
C. H. Allen	do	25	75 00	.....
Geo. D. Babcock	do	25	75 00	.....
W. J. Bennett	do	25	75 00	.....
Geo. Bernhard	do	25	75 00	.....
J. H. Bevier	do			

DETAILED STATEMENT, ETC.—(*Continued*).

NAME.	Position held.	Date.	Services.	Ex[illegible]es.
		1899.		
Charles Burke	Agent	September 25	$75 00	.....
M. T. Cain	do	25	75 00	.....
A. D. Clark	do	25	80 00	.....
W. J. Corbett	do	25	75 00	.....
J. J. Coughlin	do	25	75 00	.....
M. Dugan	do	25	75 00	.....
J. R. Earl	do	25	75 00	.....
J. M. Esmay	do	25	75 00	.....
Geo. B. Fellows	do	25	75 00	.....
R. A. French	do	25	75 00	.....
M. Galligan	do	25	75 00	.....
W. J. Gentes	do	25	80 00	.....
W. E. Griffiths	do	25	75 00	.....
J. M. Hutchings	do	25	75 00	.....
C. S. Kellogg	do	25	75 00	.....
A. M. Kibbe	do	25	75 00	.....
R. R. Kirkland	do	25	75 00	.....
J. E. Kruse	do	25	75 00	.....
J. E. Langdon	do	25	75 00	.....
J. McGuire	do	25	80 00	.....
H. S. Matteson	do	25	75 00	.....
C. J. Morganstern	do	25	75 00	.....
W. B. Mynderse	do	25	75 00	.....

R. H. Palmer	do	25	75 00	.....
W. C. Patrick	do	25	80 00	.....
J. M. Quigley	do	25	75 00	.....
W. B. Reading	do	25	75 00	.....
Charles Sears	do	25	80 00	.....
L. D. Spink	do	25	75 00	.....
C. J. Standart	do	25	75 00	.....
N. Van Horne	do	25	75 00	.....
C. B. Wakefield	do	25	75 00	.....
C. A. Warren	do	25	75 00	.....
R. T. Courtney	do	25	60 00	.....
M. S. Rivenburg	do	25	60 00	.....
M. Schifferdecker	do	25	60 00	.....
J. W. Smith, 2d	do	25	60 00	.....
Frank Wieting	do	25	60 00	.....
Mortimer Stevens	Bee inspector	25	60 00	.....
N. D. West	do	25	60 00	.....
E. A. Dowd	Stenographer	25	60 00	.....
H .F. Rossman	do	25	60 00	.....
A. B. Rossman	do	25	50 00	.....
John Evans	Clerk	25	50 00	.....
E. P. McKeefe	Chemist	25	75 00	.....
W. E. Walker	do	25	75 00	.....
J. C. Wilson	do	25	50 00	.....
C. S. Arnold	Laborer	25	50 00	.....
M. Quigley	Veterinarian	25	500 00	.....
J. Van Gelderen	Agent	25	58 00	.....
F. P. Van Denbergh	Chemist	25	75 00	.....

RECOMMENDATIONS.

For the fiscal year beginning October 1, 1900, I hereby respectfully make the following recommendations as to appropriations necessary to do the work under the present Agricultural Law, viz.:

For the general work of the Department	$150,000 00
For the New York State Agricultural Society (for premiums)	20,000 00
For Farmers' Institutes	20,000 00
For the distribution of money among agricultural societies and the American Institute of the City of New York	56,000 00
For the general work of the Experiment Station at Geneva	50,000 00
For experimental work at the Geneva Experiment Station	8,000 00
For the enforcement of the provisions of chapter 437 of the Laws of 1890 (fertilizers)	10,000 00
For the Geneva Experiment Station, for the purposes provided in chapter 965 of the Laws of 1896, as amended by chapter 687 of the Laws of 1899	10,000 00
For maintaining the veterinary college at Cornell University	20,000 00
For the State Weather Bureau	5,000 00
For the promotion of beet sugar culture	60,000 00

The detailed work of the Department will be found fully reported in the Appendix to this report under the reports of the Assistant Commissioners in the different divisions, together with those of the veterinarians and nursery inspectors.

It affords me pleasure to say that it is my belief that the Assistant Commissioners of the several divisions, as well as others in the employ of this Department, have used their utmost efforts to make the work of the Department successful and of great benefit to the interests for which it was created.

Very respectfully yours,

C. A. WIETING,

Commissioner of Agriculture.

APPENDIX.

Report of F. J. H. Kracke, Assistant Commissioner.

Report of Ebenezer J. Preston, Assistant Commissioner.

Report of T. James Owens, Assistant Commissioner.

Report of Charles T. Russell, Assistant Commissioner.

Report of Verlett C. Beebe, Assistant Commissioner.

Report of William T. Hughes, Assistant Commissioner.

Report of Asa L. Twitchell, Assistant Commissioner.

Report of James P. Clark, Assistant Commissioner.

Report of Edward J. Wheeler.

Report of Parker C. McIlhiney.

Reports of Veterinarians.

Reports of Inspectors of Nurseries.

Financial Reports of Agricultural Societies for 1898.

List of Dairy and Food Commissioners.

Laws of other States relating to milk, butter, cheese, etc.

Agricultural Law.

Report of Cornell University Agricultural Experiment Station. (Volume 2.)

Report of New York Agricultural Experiment Station, and Report of F. E. Dawley, Director of Farmers' Institutes. (Volume 3.)

Report of F. J. H. Kracke.

Hon. Charles A. Wieting, *Commissioner of Agriculture:*

Dear Sir.— In submitting this annual report of the work performed in the Second Division, it gives me pleasure to state that the past year has been one of marked activity (both in the number of cases which have been successfully prosecuted, together with the several new lines of duty placed upon this Department). The process or renovated butter law which went into effect this spring is of such magnitude that to do it justice the agents in this division might readily give their entire time to the enforcement of it, but the demands for the suppression of the illegal and surreptitious sale of oleomargarine must not at any time be overlooked. It requires the utmost skill and ingenuity to successfully cope with this class of violators, from the plausible and suave agent from another State — who first induces the customer to give an order, and the foreign express wagon which delivers the goods — to the grocer or hotel-keeper who sells it; it is the same story of shrewdness, cunning, and evasion.

During the year it was possible to obtain competent evidence against several oleomargarine agents, and after much manœuvering we were successful in having them arrested and speedily sent to prison. One of the oleomargarine agents was arrested on a Friday and the following Tuesday sent to the penitentiary for four months. It has been found necessary to invoke the aid of the Supreme Court to obtain injunctions for two large grocers, who, after being detected with oleomargarine, continued to sell it, and

were compelled to pay very heavy penalties for their disregard of the law.

During the past year paraffin has been found in the samples of oleomargarine submitted by agents to the chemists. It is a well-known fact that paraffin is absolutely indigestible; that it resists the action of nearly all acids, and that 120 degrees of heat are required to render it soluble. The best medical authorities in the country agree that the introduction of such a substance into the human stomach is dangerous to health, and the laws against the adulteration of a food product in that way should be most vigorously enforced.

The following is an extract from the report of one of our chemists: "It is pertinent to say that the object of the use of paraffin in oleomargarine is not to cheapen the article, but to make a more homogeneous fat mixture by preventing the separation of the fats and oils, and also to affect the general consistency and appearance of the mass and its behavior under the trier in sampling. One of these samples was with difficulty distinguished from butter by physical tests.

The use of paraffin under these conditions naturally gives rise to the query, What effect has it upon the system? I have been unable to find any records of researches as to the physiological effects of paraffin which throw much light on the subject. Paraffin is generally regarded as an indigestible substance. This is undoubtedly true of paraffin taken into the system by itself. An interesting physiological question, however, presents itself in connection with the use of this substance in oleomargarine for the following reasons:

1. The paraffin is dissolved in the vegetable and animal fats constituting the oleaginous part of the compound.

2. The fat mixture in most cases melts at the normal temperature of the body.

3. The fat mixture is in a highly emulsified condition.

These conditions are so different from those presented in the occasional swallowing of small masses of paraffin that no analogies as to absorbability are presented from which to draw a fair inference. Hager cautions against the internal use of paraffin. It would appear, however, that the symptoms there noted were caused by

the lighter petroleums which at that time were commonly called paraffin, and thereby possibly misleading the translators. At the present time there are no data to warrant anyone in saying that the use of paraffin as above is harmless in its effect upon the system.

Although paraffin is an unsaponifiable substance, it is a question whether, under the above conditions, some of the paraffin is not absorbed in the system along with the other fats, and whether more serious disturbances may not arise than could be expected from the ordinary digestive disturbances attributable to the indigestibility of the greater part of the adulterant."

For the last year or two the trend of judicial decisions in some of the Western States have been against the butter interests owing to the unconstitutional State laws, but this State is to be congratulated in having one of the best, if not the very best, anti-oleomargarine laws.

In 1897 the Legislature enacted a law, being an amendment to the Agricultural Law, regarding the possession of colored oleomargarine, this having become necessary for the reason that some oleomargarine violators, upon being prosecuted for selling this article, when our agents were unable to prove a sale, would offer as a defense, and sometimes successfully, that they did not own the oleomargarine, but that it had simply been left there by some friend or customer, and would be called for. The afore-mentioned amendment, however, met the evasion in the following words: "Any dealer in any article or product, the manufacture or sale of which is prohibited by this act, who shall keep, store, or display such article or product, with other merchandise or stock in his place of business, shall be deemed to have the same in his possession for sale."

During the past two or three years that amendment has been vigorously attacked from time to time as unconstitutional. On October 20, 1899, Justice Bartlett, in the Supreme Court, rendered a decision in the case of the "*People* v. *Meyer*," which not only reaffirmed the constitutionality of the color section of the

law, but declared as constitutional the possession amendment of 1897 aforementioned. As can be readily seen, this decision is a great victory for the pure butter interests and gives increased force to the law.

Butter.

The production for the current year has fallen short of former years. (The cows, for some reason, have not given as much milk as formerly and these features strongly tended to advance prices materially.) The year was profitable for those engaged in the manufacture of butter. We have had none of the low prices which ruled in former years. Even during the month of May, which is the season between hay and grass, the price did not go below seventeen cents. High prices ruled in the month of June, and still higher in July and August, the average price being higher than for the previous year. The receipts, from statistics gathered by the New York Mercantile Exchange, were about the same as for 1898, but we ran behind in October and November. The short make in New York State is accounted for by various reasons, the principal one being the exceedingly strong demand for milk. Dealers extended their operations far into the interior of the State and the condensers were also keen competitiors for milk to be used in condensing. Prices were advanced 15 to 25 per cent. during the early summer season. These conditions made it difficult for factories and creameries to get supplies sufficient to keep their plants in operation. One noticeable feature, and one which created considerable comment in commission circles, was the extremely short supply of dairy butter. It is estimated that the make will not figure up 10 per cent. of that of other years.

Producers in the State discovered that they could not compete successfully with the western product and gradually drifted into other channels. They allowed their cows to run down and many stopped the manufacture entirely. It is gratifying, however, to note that fresh stock is being purchased and greater interest is

being shown in the manufacture of dairy products. There still exists prejudice in some circles against the flavor of State creamery as compared to the article made in the West. This is, perhaps, attributable to the fact that western creamery comes forward the year round, while, on the other hand, the make of State goods is confined mainly to certain seasons of the year.

It is, however, an undisputed fact that some of the creamery made in our own State in June and July exceeded in price the western commodity, and the yearly average has been about on the same basis. It is gratifying to report that the producers in the counties of Jefferson, St. Lawrence and Lewis enjoyed during the summer and early fall an active export demand for June and July goods from Canada. This enabled the factories to effect close clearances and was possibly the result of prejudice in favor of Canadian butter, and also better shipping facilities from Canada. This demand ceased about the middle of September and naturally diverted late-made stock to home markets. Quality on the average was very good and high prices ruled.

Cheese.

The market for cheese has been one similar to the favorable conditions characterizing the butter market. Prices were advanced to a pitch not heretofore reached during the past twenty years. The make was light and Canadian buyers entered the western and northern market of the State early in the season and as a rule outbid New York buyers. Quality of the production was exceptionally good and was proof that the makers had been giving closer attention to details and had profited by the bulletins issued by our experimental stations. It is a source of regret to note that there has been no increase in the export demand, while, on the other hand, an increase was made in shipment from Canada. The factorymen were no doubt restricted in their production by scarcity of milk; otherwise, it is fair to presume that our exports would have been heavier than for the preceding year.

Milk

The milk received in this city during the past year has been of a very good quality, and we found, after a most comprehensive and complete inspection, that the adulterations were less than formerly.

INSPECTION OF MILK AT FERRIES, RAILROAD STATIONS AND STEAMBOAT LANDINGS.

During the months of June, July, August and September, a thorough inspection of milk arriving over the different railroads and steamboats for consumption in New York and Brooklyn was made, after the milk had been delivered by the common carriers to the grocers' peddlers. The plan adopted was, as usual, to obtain from the police department a detail of two or more officers for duty at each depot when inspections were made. With their assistance the wagons were formed in line as they came off the ferries or from the railroad stations into the streets. We then inspected the milk found on each wagon before allowing it to leave the line.

The milk inspected, when delivered by each railroad and steamboat line, represents one day's shipment over each line for consumption in New York and Brooklyn, to which must be added 1,600 cans estimated as the average per day by miscellaneous conveyances during those months. The result of these inspections showed, by the test applied, that only a small percentage had been adulterated, and that coming from Connecticut and New Jersey.

The receipt of milk for 1898 showed an increase of about 10 per cent. and for 1899 about 6 per cent., being in total 524,866,200 quarts for the year, being a daily receipt of 1,437,989 quarts. Prosecutions for milk adulterations have been carried on with vigor; one of the largest fines ever imposed in a criminal court for this violation was fixed upon a wholesaler whom the agents detected with a considerable quantity of adulterated milk, and who

when brought to trial defended himself ably, but the court finding him guilty he was fined three hundred and fifty dollars ($350), or a term of three months' imprisonment in the city prison.

Some work has been done on condensed milk. We have found some that was below the legal standard and promptly prosecuted the offenders, who paid the penalty, with a guarantee from the agents or representatives of the condensed milk company of an adjoining State to gather up all there was at the various stores and take it out of the State forthwith, which was immediately done, this Department having assurances that under this agreement over 18,000 cases were returned.

Linseed Oil and Paris Green.

Our agents gave a part of their time to inspection of linseed oil and found several dealers who were selling an adulterated article. Samples were taken and legal action commenced against them. Cases are now pending in the courts.

Acting under your orders, we have taken samples of Paris green from the various concerns in this city who deal in this article and forwarded same to you, so that whatever might be offered on this market would be of the required legal standard.

Bob Veal.

The enforcement of this section of our law is by no means an easy one, as many schemes and devices are resorted to to circumvent it. The age limit without a weight limit creates considerable dissatisfaction among the people who are perfectly willing to live up to the law, but are not always in a position to have a definite knowledge as to the age of the calf.

In my opinion, the law ought to be so amended as to embrace both, making it more practical and simplifying the workings of it.

Oleomargarine (Statement of Manufacturers, etc.)

The report of the Commissioner of Internal Revenue for the fiscal year ending June 30, 1899, contains the following statistics bearing upon the oleomargarine industry. Since the act of August 2, 1886, defining butter and imposing a tax upon and regulating the manufacture, sale, importation and exportation of oleomargarine, the average yearly production of this substitute for butter and total receipts from all oleomargarine sources for each fiscal year since November 1, 1886, the date the oleomargarine law took effect, is interesting as showing the extent of operations in the country, and is as follows:

On hand November 1, 1886, 181,000 pounds.

During the fiscal year ending (from November 1, 1886) to June 30, 1887	Pounds produced.	Amount received.
1887	21,513,537	$723,948 04
1888	34,325,527	864,139 88
1889	35,664,026	894,247 91
1890	32,324,032	786,291 72
1891	44,392,409	1,077,924 14
1892	48,364,155	1,266,326 00
1893	67,224,298	1,670,643 50
1894	69,632,246	1,723,479 90
1895	56,958,105	1,409,211 18
1896	50,853,234	1,219,432 46
1897	45,531,207	1,034,129 60
1898	55,388,727	1,315,708 54
1899	80,495,628	1,956,619 00
Total (pounds)	644,965,630	$15,942,101 87

The total government receipts for the year in collections from the regular oleomargarine tax of two cents per pound and from special taxes imposed upon manufacturers, retail dealers and wholesale dealers were $1,956,619.

In the fiscal years 1887 and 1888, the largest production month was March; in the fiscal year 1889, December; in the fiscal year 1890, October; in the fiscal year 1891, March; in the fiscal year 1892, March; in the fiscal year 1893, January; in the fiscal year 1894, October; in the fiscal year 1895, October; in the fiscal year 1896, October; in the fiscal year 1897, March; in the fiscal year 1898, November; while the greatest production during the fiscal year ended June 30, 1899, occurred in December. The quantity produced during these months was as follows:

	Pounds.
In March, 1887	3,568,254
In March, 1888	3,940,727
In December, 1888	4,181,317
In October, 1889	4,072,333
In March, 1891	6,723,224
In March, 1892	5,916,871
In January, 1893	7,824,657
In October, 1893	9,318,006
In October, 1894	7,046,429
In October, 1895	5,922,649
In March, 1897	4,826,677
In November, 1897	6,367,024
In December, 1898	8,964,073

Statement by States and Territories, showing number of establishments for which special tax was paid to carry on, during the fiscal year ended June 30, 1899, the business of manufacturing and dealing in oleomargarine. (Taken from Internal Revenue Report.)

STATES AND TERRITORIES.	Manufactories.	Wholesale establishments.	Retail establishments.	Total.
Alabama	....	2	19	21
Alaska	....	....	6	6
Arizona	.....	1	4	5
Arkansas	....	1	a34	35
California	.....	.....	.....	.....
Colorado	....	6	89	95
Connecticut	....	.....	5	5
Delaware	.....	1	47	48
District of Columbia	1	2	58	61
Florida	.....	5	77	82
Georgia	....	7	b4	61
Idaho	....	1	2	3
Illinois	4	10	b2,006	2,020
Indiana	3	5	c298	3 6
Indian Territory	.....	..	21	21
Iowa	.....	.....		3
Kansas	2	1	1a3	1a6
Kentucky	....	1	216	217
Louisiana	.....	d6	134	140
Maine	.....	1	16	17
Maryland	.....	e7	51	58
Massachusetts	....	11	97	108
Michigan	....	4	165	169
Minnesota	...	6	24	30
Mississippi	.....	5	12	17
Missouri	1	1	229	231
Montana	.....	....	1	1
Nebraska	.	1	72	73
Nevada	....	.....	.. .	.....
New Hampshire	....	6	13	19
New Jersey	1	7	288	296
New Mexico	....	.....	12	12
New York	....	.....	14	14
North Carolina	....	.....	9	9
North Dakota	...	.....	18	18
Ohio	2	8	995	1,005
Oklahoma	..	...	10	10
Oregon	.....	.....	3	3
Pennsylvania	.....	21	696	717
Rhode Island	3	4	326	333
South Carolina	...	2	22	24
South Dakota	....	....	4	4
Tennessee	.....	3	80	83
Texas	.....	15	147	162
Utah	.....	..	.....	.....
Vermont	...	1	....	1
Virginia	...	1	120	121
Washington	....	....	5	5
West Virginia	.....	5	167	172
Wisconsin	.....	f5	18	23
Wyoming	. ...	.	5	5
Total for 12 months ending June 30, 1899	17	163	6,875	7,055
Total for 12 months ending June 30, 1898	15	105	4, 89	4,409

Increase in manufactories, 2; increase in wholesale dealers, 58; increase in retail dealers, 2,586.

a Includes 1 establishment which was transferred to Kansas.
b Includes 1 establishment which was transferred to Michigan.
c Includes 1 establishment which was transferred to Illinois.
d Includes 1 establishment which was transferred to Pennsylvania.
e Includes 1 establishment which was transferred to Virginia.
f Includes 1 establishment which was transferred to Georgia.

Monthly Average Butter.

	Extra fresh.	Creamery held.	Extra H. F. tubs.	Best firkins.	Best western dairy.	Best imitation creamery.	FACTORY.	
							Fresh.	Held.
1898.	Cents.	Cents.	Cents	Cents.	Cents	Cents	Cents.	Cents.
October.....	21 7-8	19 5-8	18 7-8	18	15 1-2	15 3-4	13 3-4	14 3-8
November ...	23 1-4	20 1-5	19 2-5	18 -4	15 1-2	17 1-4	14	14 1-5
December ...	21	19 1-4	18 1-3	7 1-3	15 1-4	16 3-4	14 5-8	14 1-8
Average 3 months ..	23 1-24	19 2-3	19 1-5	17 1-3	15 5-12	16 11-12	14 1-8	14 1-4
1899.								
January	19 7-8	17 1-2	17 2 5	15 2-3	15 1-8	16 1-2	14 1-4	13 4-5
February	21 1-4	18	19 7-8	15 1-4	15 5-8	17 1-2	14 1-3	13 3-4
March.....	2 7-8	17 1-2	19 3-4	15	16 2-3	17 2-3	14 2-5	13 2-5
April.....	19 5-8	16 7-8	18 1 5	15	15 4-5	17	4 2-3	14 1-8
May..... ...	17 7-8	.....	16 3-4	.....	.....	14 2-5	13	... .
June.....	18 2-3	.....	17	.....	.....	15 3-4	13 7-8	.....
July.....	18 1-8	.....	1 4-5	.....	.....	15 1-2	1 1-8	.....
August .	20	21 1-2	17 3-4	.....	.....	16	14 1-2	15
September...	22 3-5	21 1-2	20 3-8	.....	.....	17 1-2	15 3-8	15 7-8
	19 9-10	18 3-4	18 2-9	15 1-4	15 1-3	16 1-3	14 1-5	14 1-4

Monthly Average Cheese.

	WHITE.		COLORED.	
	Large	Small.	Large	Small.
1898.	Cents.	Cents.	Cents.	Cents.
October.....	8 1-2	9	8 1-2	9
November	9 -8	9 1-2	9 8	9 1-2
December	10 1 4	10 2-3	10 1-4	10 2-3
Average	9 7-24	9 3-18	9 7-24	9 13-18
1899.				
January	10 1-2	1'	10 1-2	11
Febru ry	10 1 2	1 1 8	10 1-2	11 1-8
March	11 3-4	12 3-8	11 3-4	12 1-2
Apr l.....	12 1-8	12 3-5	2 1-8	12 4-5
May.....	9 1-2	9 3 8	9 -8	9 1-4
June.....	8 1-8	8 1-8	8	8
July	8 1-2	8 2-3	8 2 5	8 2-3
August	9 3-4	9 4-5	9 7 8	10
September.....	11 1-8	1 1-3	1 1-4	11 1-2
Average	10 2-9	10 1-2	10 1-6	10 5-9

From October 1, 1897, *to October* 1, 1898.

	RECEIPTS.			
	BUTTER, PACKAGES.		CHEESE, PACKAGES.	
	Eastern.	Western.	Eastern.	Western.
1897.				
November	22,781	98,504	124,861	8,394
December	25,287	103,685	94,335	5,174
1898.				
January	13,806	119,849	44,878	5,400
February	10,523	113,863	21,471	4,300
March	13,977	133,876	33,969	5,736
April	18,878	128,953	28,988	4,051
May	17,372	192,993	62,076	9,378
June	22,880	254,744	139,554	9,140
July	16,917	200,770	156,069	8,376
August	16,866	160,297	148,956	10,278
September	19,228	129,066	137,682	16,738
October	21,798	112,082	120,712	14,848
Year	220,313	1,748,682	1,113,545	101,808

	EXPORTS.					
	BUTTER, POUNDS.		CHEESE, POUNDS.		OLEO. IN POUNDS.	
	Ports of New York.	All Ports.	Ports of New York.	All Ports.	Ports of New York.	All Ports.
1897.						
November	446,912	680,791	1,656,727	2,126,154	173,740	194 420
December	437,042	507,421	1,672,348	2,517,175	155,092	329,665
1898.						
January	460,374	590,059	1,766,060	2,234,005	146,836	250,976
February	498.496	748,794	1,121,245	1,5 7,492	156,019	264,086
March	1,232,171	1,505,153	1,780,158	2,188,264	225.655	336,911
April	496.799	642,706	1,492,212	1,834,634	249,796	429,376
May	872,661	1,219,864	1,691,297	2,468.913	223,397	951,155
June	1,285,452	2,379,926	3,899,102	6,253,569	234,423	399,486
July	405,131	911,094	2.637,002	5,223,359	168,837	695,241
August	493,103	956,719	2,631,660	5,178,583	229,922	539,428
September	908,600	1,310,854	1.789,920	4,067,329	165,552	471,716
October	1,109,005	1,706,839	2,042,697	3,708,333	186,552	471,716
Year	8,646,282	13,160.296	24,180,428	39,396,810	2,315,503	5,510,708

	RECEIPTS.			
	BUTTER, PACKAGES.		CHEESE, BOXES.	
	Eastern.	Western.	Eastern.	Western.
1897.				
November	25,266	106,537	109,613	9,383
December	18,924	104,606	72,696	8,090
1898.				
January	12,065	138,757	80,779	8,549
February	8,321	129,761	81,797	3,144
March	12,136	134,226	38,726	10,084
April	20,497	124,278	30,619	4,890
May	20,293	186,773	78,282	8,036
June	27,959	241,477	147,192	15,901
July	20,479	215,480	151,117	12,907
August	16,923	155,741	141,396	13,622
September	15,833	117,663	109,596	17,057
October	18,598	117,776	126,793	21,101
Year	217,299	1,773,075	1,068,606	132,764

	EXPORTS.					
	BUTTER, POUNDS.		CHEESE, POUNDS.		OLEO., POUNDS.	
	Port of New York.	All ports.	Port of New York.	All ports.	Port of New York	All ports.
1897.						
November	605,493	806,049	1,048,231	2,022,163	247,240	412,671
December	1,448,840	1,788,403	1,184,070	1,983,772	195,296	338,188
1898.						
January	2,173,608	3,165,213	850,627	1,107,177	277,821	303,731
February	2,733,505	3,594,806	1,134,887	1,398,752	257,318	424,254
March	1,490,829	2,034,844	561,950	897,324	325,977	352,265
April	764,746	1,114,343	308,762	688,416	314,151	368,116
May	846,123	1,082,518	1,545,651	3,128,307	325,163	441,008
June	955,506	1,140,649	3,107,856	6,755,889	314,846	410,891
July	1,550,474	2,287 155	3,457,982	6,742,287	287,531	376,377
August	3,754,080	6,184,513	2,395,797	5,062,741	319,225	405,556
September	1,982,488	3,252,418	1,548,731	3,874,037	254,769	318,464
October	800,871	1,613,869	1,468,940	2,113,795	218,938	439,500
Year	19,106,563	28,064,780	18,613,484	35,274,660	3,358,375	4,591,028

Receipts and Value of Butter Handled in New York City for Eighteen Years, Ending October 31, 1899.

FOR THE YEAR ENDING OCTOBER 31, 1882.

Eastern, 44,215,900 pounds, valued at 29½ cents per pound	$13,043,717 05
Western, 35,648,850 pounds, valued at 28 cents per pound	9,981,678 00
Total, 79,864,840 pounds, valued at	$23,025,395 05

FOR THE YEAR ENDING OCTOBER 31, 1883.

Eastern, 4,804,060 pounds, valued at 26 cents per pound	$11,649,055 60
Western, 45,743,850 pounds, valued at 26 cents per pound	10,978,524 00
Total, 90,547,910 pounds, valued at	$22,627,579 60

FOR THE YEAR ENDING OCTOBER 31, 1884.

Eastern, 38,263,820 pounds, valued at 24½ cents per pound	$9,374,635 90
Western, 49,853,350 pounds, valued at 24½ cents per pound	10,967,737 00
Total, 80,117,170 pounds, valued at	$20,342,372 90

FOR THE YEAR ENDING OCTOBER 31, 1885.

Eastern, 39,480,350 pounds, valued at 22 cents per pound	$8,685,677 90
Western, 54,086,500 pounds, valued at 22 cents per pound	10,817,300 00
Total, 93,566,850 pounds, valued at	$19,502,977 00

FOR THE YEAR ENDING OCTOBER 31, 1886.

Eastern, 38,985,520 pounds, valued at 23½ cents per pound	$9,161,597 20
Western, 54,716,000 pounds, valued at 21½ cents per pound	11,763,940 00
Total, 93,701,520 pounds, valued at	$20,925,537 20
Deduct value of product handled in 1886	19,502,977 00
	$1,422,560 20
Deduct value of increased receipts over 1885	28,954 05
Net gain on same amount of receipts of butter over 1885	$1,393,606 15
Total value of milk and cream handled in New York for the year ending October 31, 1886	$8,160,750 00

FOR THE YEAR ENDING OCTOBER 31, 1887.

Eastern, 37,062,130 pounds, valued at 24 cents per pound	$8,894,911 20
Western, 56,650,350 pounds, valued at 22 cents per pound	12,463,077 00
Total, 93,712,480 pounds, valued at	$21,357,988 20
MILK AND CREAM.	
Value of milk and cream	$9,499,900 00
Total value of butter, milk and cream	$30,857,888 20
Deduct value of butter, milk and cream handled in 1886	29,086,287 20
Net gain in 1887 over 1886	$1,771,601 00
Add net gain in cheese of 1887 over 1886	687,843 00
Total net gain on butter, cheese, milk and cream handled in New York in 1887 over 1886	$2,459,444 00

FOR THE YEAR ENDING OCTOBER 31, 1888 (DAIRY PRODUCTS).

BUTTER.

Eastern, 31,784,410 pounds, valued at 24½ cents per pound	$7,787,180 45
Western, 63,457,950 pounds, valued at 22½ cents per pound	14,278,038 85
Total value of butter handled	$22,065,219 30

CHEESE.

Eastern, 98,877,955 pounds, valued at 10½ cents per pound	$10,362,185 27
Western, 3,636,360 pounds, valued at 8½ cents per pound	309,167 10
In transit for export, 7,636,850 pounds, valued at 10 cents per pound	763,685 00
Total, 110,152,065 pounds, valued at	$11,455,037 37

MILK AND CREAM.

Crude gallons	58,678,360
Cream gallons	1,191,940
Condensed milk (Pearl), gallons	71,830
Total (valued at $9,652,500), gallons	60,622,160

Total value of butter handled	$22,065,219 30
Total value of cheese handled	11,455,037 37
Total value of milk and cream handled	9,652,500 00
Total	$43,172,756 67

FOR THE YEAR ENDING OCTOBER 31, 1889 (DAIRY PRODUCTS).

BUTTER.

Eastern, 30,626,610 pounds, valued at 23 cents per pound	$7,024,120 30
Western, 77,820,650 pounds, valued at 21 cents per pound	16,342,336 50
Total, 108,447,860 pounds, valued at	$23,366,456 80

CHEESE.

Eastern, 101,712,655 pounds, valued at 10 cents per pound	$10,171,265 50
Western, 3,660,120 pounds, valued at 9 cents per pound	329,410 80
Total, 105,373,755 pounds, valued at	$10,500,676 30

MILK AND CREAM.

Crude gallons	64,213,870
Crude gallons sold to condensers	15,000,000
Cream, gallons	1,322,840
Condensed milk, gallons (unsweetened)	766,070
Total (valued at $11,675,500), gallons	81,302,780

Total value of butter handled	$23,386,456 80
Total value of cheese handled	10,500,676 30
Total value of milk, cream and condensed milk handled	11,675,500 00
Total	$45,562,633 10

FOR THE YEAR ENDING OCTOBER 31, 1890 (DAIRY PRODUCTS).

BUTTER.

Eastern, 26,560,660 pounds, valued at 20 cents per pound	$5,312,132 00
Western, 71,094,500 pounds, valued at 18 cents per pound	12,797,010 00
Total, 97,655,160 pounds, valued at	$18,109,142 00

CHEESE.

Eastern, 102,118,115 pounds, valued at 9¾ cents per pound	$9,956,516 22
Western, 3,483,090 pounds, valued at 8 cents per pound	278,647 20
Total, 105,601,205 pounds, valued at	$10,235,163 42

MILK AND CREAM.

Crude, gallons	62,852,940
Crude, gallons sold to customers	16,500,000
Cream, gallons	1,373,220
Condensed milk, gallons (unsweetened)	693,670
Total (valued at $12,085,000), gallons	81,419,830

Total value of butter handled	$18,109,142 00
Total value of cheese handled	10,235,163 42
Total value of milk, cream and condensed milk handled	12,085,000 00
Total	$40,429,305 42

FOR THE YEAR ENDING OCTOBER 31, 1891 (DAIRY PRODUCTS).

BUTTER.

Eastern, 395,301 packages of 70 pounds (average) 27,671,070 pounds, valued at 21 cents per pound	$6,364,346 10
Western, 1,408,324 packages of 50 pounds (average), 27,671,070 pounds, valued at 21 cents per pound	14,787,402 00
Total pounds, 98,087,870, valued at	$21,151,748 10

CHEESE.

Eastern, 86,958,200 pounds, valued at 10 cents per pound	$8,695,820 00
Western, 3,331,950 pounds, valued at 9 cents per pound	299,875 50
Total pounds, 90,290,150, valued at	$8,995,695 50

MILK AND CREAM.

Crude gallons	63,057,660
Crude, gallons sold to condensers	17,500,000
Cream, gallons	1,441,930
Condensed milk, gallons (unsweetened)	699,890
Total (valued at $14,128,677), gallons	82,699,480

Total value of butter handled	$21,151,748 10
Total value of cheese handled	8,995,695 50
Total value of milk, cream and condensed milk handled	14,128,677 00
Total	$44,276,120 60

FOR THE YEAR ENDING OCTOBER 31, 1892 (DAIRY PRODUCTS).

BUTTER.

Eastern, 414,765 packages of 70 pounds (average) 29,032,930 pounds, valued at	$6,967,900 00
Western, 1,248,412 packages of 50 pounds (average) 62,420,600 pounds, valued at	13,732,532 80
Total pounds, 91,453,520, value	$20,700,432 80

CHEESE.

Eastern, 91,033,950 pounds, valued at 11 cents per pound	$10,013,734 50
Western, 4,756,510 pounds, valued at 10 cents per pound	473,651 00
Total pounds, 93,770,310, valued at	$10,487,385 50

MILK AND CREAM.

Crude, gallons	70,403,420
Crude, gallons sold to condensers	18,000,000
Cream, gallons	1,826,890
Condensed milk (unsweetened), gallons	616,900
Total (valued at $15,116,668.72), gallons	90,847,210

Total value of butter handled	$20,700,432 80
Total value of cheese handled	10,487,385 50
Total value of milk, cream and condensed milk handled	15,116,668 72
Total	$46,304,487 02

FOR THE YEAR ENDING OCTOBER 31, 1893 (DAIRY PRODUCTS).

BUTTER.

Eastern, 430,387 packages of 70 pounds (average), 30,126,460 pounds	$7,531,615 00
Western, 1,184,708 packages of 50 pounds (average), 59,235,400 pounds, valued at 23 cents per pound	13,624,042 00
Total pounds, 89,361,860, valued at	$21,155,657 00

CHEESE.

Eastern, 87,380,645 pounds, valued at 11 cents per pound	$9,611,870 95
Western, 4,565,205 pounds, valued at 10 cents per pound	456,520 50
Total pounds, 91,945,850, valued at	$10,068,391 45

MILK AND CREAM.

Crude, gallons	72,460,500
Crude, gallons, sold to condensers	18,000,000
Cream, gallons	2,037,400
Condensed milk (unsweetened), gallons	537,850
Total (valued at $16,249,854.50) gallons	93,035,750

Total value of butter handled	$21,155,657 00
Total value of cheese handled	10,068,391 45
Total value of milk, cream and condensed milk handled	16,249,854 50
Total	$47,473,902 95

FOR THE YEAR ENDING OCTOBER 31, 1894 (DAIRY PRODUCTS).

BUTTER.

Eastern, 341,705 packages of 70 pounds (average), 23,719,350 pounds, valued at 23 cents per pound	$5,501,450 50
Western, 1,372,565 packages of 50 pounds (average), 88,628,150 pounds, valued at 21 cents per pound	14,411,911 50
Total pounds, 92,548,500, valued at	$19,913,362 00

CHEESE.

Eastern, 80,671,755 pounds, valued at 10 cents per pound	$8,067,175 50
Western, 6,384,550 pounds, valued at 9 cents per pound	574,609 50
Total pounds, 87,533,905, valued at	8,641,785 00

MILK AND CREAM.

Crude, gallons	74,172,560
Crude, gallons sold to consumers	18,000,000
Cream, gallons	2,043,750
Condensed milk (unsweetened), gallons	633,870
Total (valued at $16,107,648), gallons	94,850,180

Total value of butter handled	$19,913,362 00
Total value of cheese handled	8,641,785 00
Total value of milk, cream and condensed milk handled	16,107,648 00
Total	$44,662,795 00

FOR THE YEAR ENDING OCTOBER 31, 1895.

BUTTER.

Eastern, 26,742 packages of 70 pounds (average) 18,601,940 pounds, valued at 20 cents per pound	$3,720,388 00
Western, 1,522,881 packages of 50 pounds (average) 76,144,050 pounds, valued at 19 cents per pound	14,467,369 50
Total, 94,745,990 pounds, valued at	$18,187,757 50

CHEESE.

Eastern, 61,255,920 pounds, valued at 9½ cents per pound	$5,819,183 90
Western, 5,977,500 pounds, valued at 8½ cents per pound	508,087 50
Total value	$6,327,271 40

MILK AND CREAM.

Crude, quarts	309,643,600
Crude, quarts sold to condensers	72,000,000
Cream quarts	8,885,040
Condensed milk (unsweetened), quarts	2,974,440
Total (valued at $16,778,823.49), quarts	393,503,080

Total value of butter handled	$18,187,757 50
Total value of cheese handled	6,327,271 40
Total value of milk, cream and condensed milk handled	16,778,823 49
Total	$41,293,852 39

FOR THE YEAR ENDING OCTOBER 31, 1896.

BUTTER.

Eastern, 236,309 packages of 70 pounds (average) 16,541,630 pounds, valued at 18 cents per pound	$2,977,493 40
Western, 1,645,017 packages of 50 pounds (average) 96,150,850 pounds, valued at 18 cents per pound	16,345,644 50
Total, 113,692,480 pounds, valued at	$19,323,137 90

CHEESE.

Eastern, 59,133,120 pounds, valued at 9½ cents per pound	$5,617,645 40
Western, 5,588,520 pounds, valued at 8½ cents per pound	475,024 20
Total, 64,721,640 pounds, valued at	$6,092,669 60

MILK AND CREAM.

Crude, quarts	316,111,280
Crude, quarts sold to condensers	75,000,000
Cream, quarts	8,859,440
Condensed milk (unsweetened), quarts	3,205,960
Total (valued at $15,781,881.20), quarts	403,176,680

Total value of butter handled	$19,493,137 90
Total value of cheese handled	6,092,669 60
Total value of milk, cream and condensed milk handled	15,781,881 20
Total	$41,367,688 70

FOR THE YEAR ENDING OCTOBER 31, 1897.

BUTTER.

Eastern, 209,808 packages of 70 pounds (average) 14,686,560 pounds, valued at 18 cents per pound	$2,642,580 80
Western, 1,964,675 packages of 50 pounds (average) 98,233,750 pounds, valued at 17 cents per pound	16,699,737 50
Total, 112,920,310 pounds, valued at	$19,342,318 30

CHEESE.

Eastern, 66,598,300 pounds, valued at 10 cents per pound	$6,659,830 00
Western, 5,699,080 pounds, valued at 9 cents per pound	512,917 20
Total, 72,297,380 pounds, valued at	$7,172,747 20

MILK AND CREAM.

Crude, quarts	328,795,480
Crude, quarts sold to condensers	75,000,000
Cream, quarts	9,331,840
Condensed milk (unsweetened), quarts	2,406,920
Total (valued at $15,972,841.42), quarts	415,534,240

Total value of butter handled	$19,342,318 30
Total value of cheese handled	7,172,747 20
Total value of milk, cream and condensed milk handled	15,872,841 42
Total	$42,387,906 92

FOR THE YEAR ENDING OCTOBER 31, 1898.

The receipts and value of dairy products handled in New York City during the year ending October 31, 1898, were as follows:

BUTTER.

Eastern, 220,313 packages of 70 pounds (average) 15,421,910 pounds, valued at 17 cents per pound	$2,930,162 90
Western, 1,748,682 packages of 50 pounds (average) 87,434,100 pounds, valued at 18 cents per pound	15,738,138 00
Total, 102,856,010 pounds, valued at	$18,668,300 90

CHEESE.

Eastern, 66,812,700 pounds, valued at 8 cents per pound	$5,345,016 00
Western, 4,072,320 pounds, valued at 7 cents per pound	285,062 40
Total, 70,885,020 pounds, valued at	$5,630,078 40

MILK.

	Quarts.
Cans of crude milk of forty quarts each	8,738,625
Cans of cream of forty quarts each	265,761
Cans of unsweetened condensed milk of forty quarts each	78,669
There is also produced within the State of New York, and sold during the year to condensers, most of which reaches the New York market in condensed form in small cans, a large amount of crude milk estimated to be not less than 50,000 cans of forty quarts each	2,000,000

Value of crude milk handled	$12,321,451 25
Value of cream handled	1,873,615 05
Value of unsweetened condensed milk handled,	443,693 16
Value of crude milk sold to condensers	2,820,000 00
Total value	$17,458,769 46

Total value of butter handled	$18,668,300 90
Total value of cheese handled	5,630,078 40
Total value of milk, butter and cheese handled during 1898	41,757,138 76
Total value of dairy products handled during year of 1897	42,387,906 92
Total decrease of value dairy products handled, compared with 1897	650,738 16

The statistics of dairy products handled in New York City in 1897 show by comparison with 1898 that there has been an increase in quantity of eastern butter received in this city of 735,350 pounds, and an increase of 8,800,470 gallons of milk, cream and condensed milk; also that there was a decrease in the receipts of cheese during the same period amounting to 1,412,360 pounds.

The following table will show the total of products handled during the year:

In value of eastern butter handled in 1898	$2,930,162 90
Compared with 1897	2,642,580 80
In value of eastern cheese handled	5,345,016 00
Compared with 1897	6,659,830 00
In value of milk, cream and condensed milk, same period	17,458,759 46
Compared with 1897	15,872,841 42
In value of eastern dairy products handled in 1898	25,733,938 36

Total value of eastern dairy products handled in New York City during the year 1897.....	$25,175,252 22

EASTERN DAIRY PRODUCTS.

Butter (increase)	.....	$287,582 10
Cheese (decrease)	$1,314,826 00	.....
Crude milk, cream and condensed milk (increase) ...	.....	1,585,918 04
Total	$1,314,826 00	$1,873,500 14
Total increase		$558,674 14

FOR THE YEAR ENDING OCTOBER 31, 1899.

The receipts and value of dairy products handled in New York City during the year ending October 31, 1899, were as follows:

BUTTER.

Eastern, 217,299 packages of 70 pounds (average) 15,210,930 pounds, valued at 18 cents per pound	$2,737,967 40
Western, 1,773,075 packages of 50 pounds (average) 88,653,750 pounds, valued at 19 cents per pound	16,844,212 50
Total, 103,864,680 pounds, valued at.....	$19,582,179 90

CHEESE.

Eastern, 58,773,330 pounds, valued at 10 cents per pound	$5,877,333 00
Western, 5,310,560 pounds, valued at 9 cents per pound	477,950 40
Total, 64,083,890 pounds, valued at.....	$6,355,283 40

MILK.

	Quarts.
Cans of crude milk, forty quarts each	9,076,769
Cans of cream of forty quarts each	318,370
Cans of unsweetened condensed milk of forty quarts each	83,259
There is also produced within the state of New York, and sold during the year to condensers, most of which reached the New York market in condensed form in small cans a large amount of crude milk estimated to be not less than 53,000 cans of forty quarts each	2,120,000

Value of crude milk handled	$12,707,476 60
Value of cream handled	2,228,590 00
Value of unsweetened condensed milk handled,	466,250 40
Value of crude milk sold to condensers	2,968,000 00
Total value	$18,370,317 00

Total value of butter handled	$19,582,179 90
Total value of cheese handled	6,355,283 40
Total value of milk, condensed milk and cream handled	18,370,317 00
Total value	$44,307,780 30

Total value of dairy products handled during the year 1899	$44,307,780 30
Total value of dairy products handled during the year 1898	41,757,138 76
Total increase of value dairy products handled, compared with the year 1898	$2,550,645 54

The statistics of dairy products handled in New York City in 1898 show by comparison with 1899 that there has been a decrease in quantity of eastern butter received in this city of 210,980 pounds, and a decrease in the receipts of cheese amounting to 6,801,130 pounds; also that there was an increase of 5,153,430 gallons of milk, cream and condensed milk during the same period.

The following table will show the total of products handled during the year:

In value of eastern butter handled in 1899....	$2,737,967 40
Compared with 1898.....	2,930,162 90
In value of eastern cheese handled	5,877,333 00
Compared with 1898	5,345,016 00
In value of milk, cream and condensed milk, same period	18,370,317 00
Compared with 1898	17,458,759 46
In value of eastern dairy products handled in 1899	26,985,617 40
Total value of eastern dairy products handled in New York City during the year 1898.....	$25,733,938 36

EASTERN DAIRY PRODUCTS.

Butter (decrease)	$192,195 50	.....
Cheese (increase)	.....	$532,317 00
Crude milk, cream and condensed milk (increase) ..	.....	911,557 54
Total	$192,195 50	$1,443,874 54
Total increase		$1,251,679 04

The following statistics giving the value of eastern dairy products handled in New York City for the past ten years, show an

increase in value annually from 1890 to 1895, and a decrease in 1894, 1895, 1896 and 1897, and an increase in 1898 and 1899:

TOTAL YEARLY VALUE OF PRODUCTS HANDLED, 1890–1899.

Eastern, 1890	$27,351,657 22
Eastern, 1891	29,189,943 10
Eastern, 1892	32,148,404 92
Eastern, 1893	33,392,740 45
Eastern, 1894	29,676,395 39
Eastern, 1895	26,318,395 39
Eastern, 1896	24,377,020 00
Eastern, 1897	25,175,252 22
Eastern, 1898	25,733,938 36
Eastern, 1899	26,985,617 40
Western, 1890	$13,075,657 20
Western, 1891	15,087,277 50
Western, 1892	14,206,083 00
Western, 1893	14,080,562 50
Western, 1894	14,986,521 00
Western, 1895	16,975,456 50
Western, 1896	46,990,668 70
Western, 1897	16,699,737 50
Western, 1898	16,023,200 40
Western, 1899	17,322,162 90

Exports of Butter and Cheese.

The following statistics, taken from the records of the New York Mercantile Exchange, show the exports of butter and cheese each year since November 1, 1893:

BUTTER.

	Pounds.
From the port of New York, 1883	18,811,400
From the port of New York, 1884	15,865,600

	Pounds.
From the port of New York, 1885.....	14,601,550
From the port of New York, 1886.....	11,677,750
From the port of New York, 1887.....	9,933,400
From the port of New York, 1888.....	7,000,650
From the port of New York, 1889.....	19,941,176
From the port of New York, 1890.....	20,623,534
From the port of New York, 1891.....	11,115,505
From the port of New York, 1892.....	9,083,478
From the port of New York, 1893.....	5,336,449
From the port of New York, 1894.....	8,288,670
From the port of New York, 1895.....	11,133,747
From the port of New York, 1896.....	18,540,091
From the port of New York, 1897.....	25,757,263
From the port of New York, 1898.....	8,646,282
From the port of New York, 1899.....	19,106,563

	Pounds.
From all ports in the United States, 1883.....	22,375,708
From all ports in the United States, 1884.....	21,391,196
From all ports in the United States, 1885.....	19,593,872
From all ports in the United States, 1886.....	14,404,727
From all ports in the United States, 1887.....	12,531,171
From all ports in the United States, 1888.....	8,749,366
From all ports in the United States, 1889.....	25,983,054
From all ports in the United States, 1890.....	23,895,914
From all ports in the United States, 1891.....	14,970,538
From all ports in the United States, 1892.....	11,351,250
From all ports in the United States, 1893.....	6,837,289
From all ports in the United States, 1894.....	10,231,417
From all ports in the United States, 1895.....	13,935,017
From all ports in the United States, 1896.....	23,335,729
From all ports in the United States, 1897.....	35,631,967
From all ports in the United States, 1898.....	13,160,296
From all ports in the United States, 1899.....	28,064,780

CHEESE.

	Pounds.
From the port of New York, 1883	97,897,850
From the port of New York, 1884	96,634,256
From the port of New York, 1885	82,934,750
From the port of New York, 1886	78,763,400
From the port of New York, 1887	72,529,500
From the port of New York, 1888	75,840,700
From the port of New York, 1889	75,046,326
From the port of New York, 1890	70,208,270
From the port of New York, 1891	61,299,205
From the port of New York, 1892	67,432,651
From the port of New York, 1893	53,293,060
From the port of New York, 1894	52,903,719
From the port of New York, 1895	30,692,702
From the port of New York, 1896	25,947,401
From the port of New York, 1897	42,514,776
From the port of New York, 1898	24,180,428
From the port of New York, 1899	18,613,484

	Pounds.
From all ports in the United States, 1883	111,973,140
From all ports in the United States, 1884	111,950,686
From all ports in the United States, 1885	95,047,243
From all ports in the United States, 1886	86,636,685
From all ports in the United States, 1887	87,069,804
From all ports in the United States, 1888	81,595,304
From all ports in the United States, 1889	98,140,486
From all ports in the United States, 1890	91,014,571
From all ports in the United States, 1891	77,148,794
From all ports in the United States, 1892	81,589,361
From all ports in the United States, 1893	67,925,712
From all ports in the United States, 1894	68,607,186
From all ports in the United States, 1895	40,610,242
From all ports in the United States, 1896	37,515,798
From all ports in the United States, 1897	61,176,207
From all ports in the United States, 1898	39,396,810
From all ports in the United States, 1899	35,274,660

	Pounds.
The total receipts of cheese in the city of New York during the year ending October 31, 1894, were	87,533,905
Less exports from port of New York, same period	50,375,760
Leaving for home trade	37,158,145
The total receipts of cheese in the city of New York during the year ending October 31, 1895, were	76,233,120
Less exports from New York, same period	28,008,368
Leaving for home trade	47,224,752
The total receipts of cheese in the city of New York during the year ending October 31, 1896, were	64,721,640
Less exports	27,631,735
Leaving for home trade	37,089,905

Being 1,134,847 pounds less for our home trade than the previous year.

The total receipts of cheese in the city of New York during the year ending October 31, 1897, were	88,468,380
Less exports	42,514,776
Leaving for home trade	45,953,604

Being 8,865,699 pounds more than the previous year for home consumption.

The total receipts of cheese in the city of New York during the year ending October 31, 1898, were	70,885,020
Less exports	24,180,428
Leaving for home trade	46,704,592

Being 750,988 pounds more than the previous year for home consumption.

The total receipts of cheese in the city of New York during the year ending October 31, 1899, were	64,083,890
Less exports	18,613,484
Leaving for home trade	45,470,406

Being 1,234,186 pounds less for our home trade than the previous year.

Detailed Report of Work Performed.

LINSEED OIL.

Charles Sears, expert, employed in the above-named service seventeen days.

Number of days obtaining evidence	2
Number of days inspecting stores	15
Total number of days	17

Number of samples purchased and taken	12
Number of samples delivered to chemist	3
Number of complaints made	1
Number of stores inspected	277
Number of barrels and packages of oil inspected	1,108
Estimated number of miles traveled	685

John McGuire, expert, employed in the above-named service 15 days:

Number of days obtaining evidence	3
Number of days inspecting stores	12
Total number of days	15

Number of samples purchased and taken	10
Number of samples delivered to chemist	4
Number of stores inspected	260
Number of barrels and packages of oil inspected	1,040
Estimated number of miles traveled	596

William J. Gentes, expert, employed in the above-named service 4 days:

Number of days inspecting stores	4
Total number of days	4

Number of samples purchased and taken	1
Number of samples delivered to chemist	
Number of stores inspected	35
Number of barrels and packages of oil inspected	102
Estimated number of miles traveled	135

J. M. Esmay, expert, employed in the above-named service 4 days:

Number of days inspecting stores	4
Total number of days	4

Number of samples purchased and taken	1
Number of samples delivered to chemist	1
Number of stores inspected	10
Number of barrels and packages of oil inspected	50
Estimated number of miles traveled	200

VINEGAR.

Arch D. Clark, expert, employed in the above-named service 51 days:

Number of days in court	10
Number of days obtaining evidence	4
Number of days on special duty	5
Number of days inspecting stores	
Number of days inspecting wholesale stores and manufactories	4
Total number of days	51

Number of samples purchased and taken	3
Number of samples delivered to chemist	1
Number of appearances in cases	16
Number of complaints made	1
Number of wholesale stores and manufactories inspected	22
Number of barrels and casks of vinegar inspected	517
Number of retail stores inspected	910
Number of barrels and kegs of vinegar inspected	1,782
Total number of inspections	2,299
Estimated number of miles traveled	1,585

J. M. Esmay, expert, employed in the above-named service 16 days:

Number of days in court	3
Number of days obtaining evidence	2
Number of days on special duty	1

Number of days inspecting stores	6
Number of days inspecting wholesale stores and manufactories	4
Total number of days	16

Number of samples purchased and taken	2
Number of samples delivered to chemist	1
Number of appearances in cases	20
Number of wholesale stores and manufactories inspected	25
Number of barrels and casks of vinegar inspected	550
Number of retail stores inspected	300
Number of barrels and kegs of vinegar inspected	1,200
Total number of inspections	1,750
Estimated number of miles traveled	645

Charles Sears, expert, employed in the above-named service, 27 days:

Number of days in court	7
Number of days obtaining evidence	2
Number of days inspecting stores	14
Number of days inspecting wholesale stores and manufactories	4
Total number of days	27

Number of samples purchased and taken	5
Number of samples delivered to chemist	3
Number of appearances in cases	25
Number of complaints made	3
Number of wholesale stores and manufactories inspected	48
Number of barrels and casks of vinegar inspected	840
Number of retail stores inspected	752

Number of barrels and kegs of vinegar inspected	1,736
Total number of inspections	2,576
Estimated number of miles traveled	820

William J. Gentes, expert, employed in the above-named service 40 days:

Number of days in court	4
Number of days obtaining evidence	3
Number of days on special duty	1
Number of days inspecting stores	17
Number of days inspecting wholesale stores and manufactories	15
Total number of days	40

Number of samples purchased and taken	30
Number of samples delivered to chemist	7
Number of appearances in cases	24
Number of complaints made	5
Number of wholesale stores and manufactories inspected	65
Number of barrels and casks of vinegar inspected	950
Number of retail stores inspected	680
Number of barrels and kegs of vinegar inspected	1,620
Total number of inspections	2,570
Estimated number of miles traveled	1,200

John McGuire, expert, employed in the above-named service 57 days:

Number of days in court	12
Number of days obtaining evidence	4

Number of days on special duty	1
Number of days inspecting stores	35
Number of days inspecting wholesale stores and manufactories	5
Total number of days	57

Number of samples purchased and taken	6
Number of samples delivered to chemists	6
Number of appearances in cases	35
Number of complaints made	4
Number of wholesale stores and manufactories inspected	28
Number of barrels and casks of vinegar inspected	570
Number of retail stores inspected	929
Number of barrels and kegs of vinegar inspected	1,910
Total number of inspections	2,480
Estimated number of miles traveled	1,690

James H. Bevier, expert, employed in the above-named service 55 days:

Number of days in court	14
Number of days obtaining evidence	4
Number of days on special duty	2
Number of days inspecting stores	30
Number of days inspecting wholesale stores and manufactories	5
Total number of days	55

Number of samples purchased and taken	2
Number of samples delivered to chemist	2
Number of appearances in cases	31

Number of complaints made	1
Number of wholesale stores and manufactories inspected	22
Number of barrels and casks of vinegar inspected	792
Number of retail stores inspected	935
Number of barrels and kegs of vinegar inspected	1,990
Total number of inspections	2,782
Estimated number of miles traveled	1,685

Wellington C. Patrick, expert, employed in the above service 60 days:

Number of days in court	18
Number of days obtaining evidence	2
Number of days on special duty	4
Number of days inspecting stores	32
Number of days inspecting wholesale stores and manufactories	4
Total number of days	60

Number of samples purchased and taken	3
Number of samples delivered to chemist	2
Number of appearances in cases	70
Number of wholesale stores and manufactories inspected	20
Number of barrels and casks of vinegar inspected	985
Number of retail stores inspected	964
Number of barrels and kegs of vinegar inspected	2,075
Total number of inspections	3,060
Estimated number of miles traveled	2,060

MILK.

John McGuire, expert, employed in the above service 50 days:

Number of days in court	16
Number of days obtaining evidence	8

Number of days inspecting milk and condensed milk..	24
Number of days on special duty	2
Total number of days	50

Number of stores milk inspected	180
Number of cans milk inspected	365
Number of dairies and creameries' milk inspected on delivery from railroads and steamboats	1,461
Number of cans inspected	12,079
Number of peddlers' milk inspected	49
Number of cans inspected	392
Total cans milk inspected	12,834

Total number of samples delivered to chemists.....	18
Total number of complaints made	7
Total number of appearances in cases	40
Estimated number of miles traveled	2,920

Charles A. Sears, expert, employed in the above-named service 65 days:

Number of days in court	14
Number of days obtaining evidence	10
Number of days inspecting milk and condensed milk..	36
Number of days inspecting herds	5
Total number of days	65

Number of stores milk inspected	140
Number of cans milk inspected	560
Number of dairies and creameries' milk inspected on delivery from railroads and steamboats	1,530

Number of cans inspected	12,355
Number of peddlers' milk inspected	112
Number of cans inspected	770
Total cans milk inspected	13,685

Number of inspections of stables	6
Number of cows inspected	422
Total number of samples delivered to chemists	21
Total number of complaints made	15
Total number of appearances in cases	85
Estimated number of miles traveled	3,500

J. M. Esmay, expert, employed in the above-named service 51 days:

Number of days in court	8
Number of days obtaining evidence	3
Number of days inspecting milk	30
Number of days on special duty	5
Number of days inspecting herds	5
Total number of days	51

Number of stores milk inspected	200
Number of cans milk inspected	435
Number of dairies and creameries' milk inspected on delivery from railroads and steamboats	1,470
Number of cans inspected	12,160
Number of peddlers' milk inspected	35
Number of cans inspected	230
Total cans milk inspected	12,825

Number of stables inspected	8
Number of cows inspected	300
Total number of samples delivered to chemists	10
Total number of complaints made	10
Total number of appearances in cases	30
Estimated number of miles traveled	2,500

Arch D. Clark, expert, employed in the above service 50 days:

Number of days in court	14
Number of days obtaining evidence	6
Number of days inspecting milk	24
Number of days on special duty	3
Number of days inspecting herds	3
Total number of days	50

Number of stores milk inspected	189
Number of cans milk inspected	377
Number of dairies and creameries' milk inspected on delivery from railroads and steamboats	1,435
Number of cans inspected	11,936
Number of peddlers' milk inspected	52
Number of cans inspected	416
Total cans milk inspected	12,729

Number of inspections of stables	5
Number of cows inspected	308
Total number of samples delivered to chemists	11
Total number of complaints made	6
Total number of appearances in cases	317
Estimated number of miles traveled	2,895

W. C. Patrick, expert, employed in the above-named service 51 days:

Number of days in court	2
Number of days obtaining evidence	5
Number of days inspecting milk	34
Number of days inspecting herds	14
Number of days on special duty	1
Total number of days	57

Number of stores milk inspected	210
Number of cans milk inspected	431
Number of dairies and creameries' milk inspected on delivery from railroads and steamboats	1,350
Number of cans inspected	12,050
Number of peddlers' milk inspected	30
Number of cans inspected	219
Total cans milk inspected	12,700

Number of inspections of stables	25
Number of cows inspected	485
Total number of samples delivered to chemists	10
Total number of complaints made	8
Total number of appearances in cases	11
Estimated number of miles traveled	3,123

James H. Bevier, expert, employed in the above-named service 24 days:

Number of days in court	2
Number of days obtaining evidence	3

Number of days inspecting milk	15
Number of days on special duty	4
Total number of days	24

Number of stores milk inspected	120
Number of cans milk inspected	408
Number of dairies and creameries' milk inspected on delivery from railroads and steamboats	646
Number of cans inspected	5,659
Number of peddlers' milk inspected	42
Number of cans inspected	304
Total cans milk inspected	6,371

Total number of samples delivered to chemists	6
Total number of complaints made	1
Total number of appearances in cases	2
Estimated number of miles traveled	1,296

William J. Gentes, expert, employed in the above-named service 59 days:

Number of days in court	10
Number of days obtaining evidence	7
Number of days inspecting milk	31
Number of days on special duty	1
Number of days inspecting herds	10
Total number of days	59

Number of stores milk inspected	150
Number of cans milk inspected	600

Number of dairies and creameries' milk inspected on delivery from railroads and steamboats	1,486
Number of cans inspected	12,155
Number of peddlers' milk inspected	40
Number of cans inspected	300
Total cans milk inspected	13,055

Number of inspection of stables	10
Number of cows inspected	400
Total number of samples delivered to chemists	11
Total number of complaints made	10
Total number appearances in cases	34
Estimated number of miles traveled	2,840

OLEOMARGARINE.

J. M. Esmay, expert, employed in the above-named service 234 days:

Number of days in court	52
Number of days obtaining evidence	6
Number of days on special duty	10
Number of days inspecting stores and bakeries	130
Number of days visiting hotels, restaurants and boarding-houses	36
Total number of days	234

Number of samples purchased and taken	474
Number of samples delivered to chemists	37
Number of evenings obtaining evidence	56
Number of complaints made	30
Number of appearances in cases	243
Number of stores and bakeries inspected	5,380

Number of hotels, restaurants and boarding-houses inspected	800
Estimated number of miles traveled	9,850

Arch D. Clark, expert, employed in the above-named service 202 days:

Number of days in court	54
Number of days obtaining evidence	10
Number of days on special duty	23
Number of days inspecting stores and bakeries	84
Number of days visiting hotels, restaurants and boarding-houses	31
Total number of days	202

Number of samples purchased and taken	515
Number of samples delivered to chemist	30
Number of evenings obtaining samples	48
Number of complaints made	24
Number of appearances in cases	146
Number of stores and bakeries inspected	4,160
Number of hotels, restaurants and boarding-houses inspected	622
Estimated number of miles traveled	5,240

John McGuire, expert, employed in the above-named service 180 days:

Number of days in court	41
Number of days obtaining evidence	11
Number of days on special duty	22
Number of days inspecting stores and bakeries	74

Number of days visiting hotels, restaurants and boarding-houses	32
Total number of days	180
Number of samples purchased and taken	465
Number of samples delivered to chemist	18
Number of evenings obtaining samples	46
Number of complaints made	15
Number of appearances in cases	120
Number of stores and bakeries inspected	3,980
Number of hotels, restaurants and boarding-houses inspected	612
Estimated number of miles traveled	4,260

Charles Sears, expert, employed in the above-named service 195 days:

Number of days in court	46
Number of days obtaining evidence	12
Number of days on special duty	10
Number of days inspecting stores and bakeries	2
Number of days visiting hotels, restaurants and boarding-houses	35
Total number of days	195
Number of samples purchased and taken	466
Number of samples delivered to chemist	41
Number of evenings obtaining samples	62
Number of complaints made	30
Number of appearances in cases	211
Number of stores and bakeries inspected	4,540
Number of hotels, restaurants and boarding-houses inspected	870
Estimated number of miles traveled	8,400

James H. Bevier, expert, employed in the above-named service 145 days:

Number of days in court	42
Number of days obtaining evidence	12
Number of days on special duty	6
Number of days inspecting stores and bakeries	70
Number of days visiting hotels, restaurants and boarding-houses	15
Total number of days	145

Number of samples purchased and taken	348
Number of samples delivered to chemist	4
Number of evenings obtaining samples	29
Number of complaints made	2
Number of appearances in cases	80
Number of stores and bakeries inspected	3,486
Number of hotels, restaurants and boarding-houses inspected	521
Estimated number of miles traveled	4,350

W. C. Patrick, expert, employed in the above-named service 186 days:

Number of days in court	60
Number of days obtaining evidence	11
Number of days on special duty	13
Number of days inspecting stores and bakeries	75
Number of days visiting hotels, restaurants and boarding-houses	27
Total number of days	186

Number of samples purchased and taken	360
Number of samples delivered to chemist	33
Number of evenings obtaining samples	60
Number of complaints made	31
Number of appearances in cases	140
Number of stores and bakeries inspected	4,173
Number of hotels, restaurants and boarding-houses inspected	763
Estimated number of miles traveled	4,521

William J. Gentes, expert, employed in the above-named service 201 days:

Number of days in court	66
Number of days obtaining evidence	3
Number of days on special duty	5
Number of days inspecting stores and bakeries	102
Number of days visiting hotels, restaurants and boarding-houses	25
Total number of days	201

Number of samples purchased and taken	481
Number of samples delivered to chemist	58
Number of evenings obtaining samples	70
Number of complaints made	57
Number of appearances in cases	276
Number of stores and bakeries inspected	5,760
Number of hotels, restaurants and boarding-houses inspected	802
Estimated number of miles traveled	6,500

Analyses.

VINEGAR.

Joseph F. Geisler, Ph. C., Chemist:

Number of analyses of vinegar samples	6
Number of appearances in cases	15
Number of days in court	10

Edward G. Love, Ph. C., Chemist:

Number of analyses of vinegar samples	6
Number of appearances in cases	14
Number of days in court	10

MILK.

Joseph F. Geisler, Ph. C., Chemist:

Number of analyses of milk samples	27
Number of appearances in cases	16
Number of days in court	14

Edward G. Love, Ph. C., Chemist:

Number of analyses of milk samples	54
Number of appearances in cases	19
Number of days in court	15

OLEOMARGARINE.

Joseph F. Geisler, Ph. C., Chemist:

Number of analyses of oleomargarine and butter samples	119
Number of appearances in cases	134
Number of days in court	59

Edward G. Love, Ph. C., Chemist:

Number of analyses of oleomargarine and butter samples	138
Number of appearances in cases	141
Number of days in court	67

TOTAL WORK PERFORMED.

VINEGAR.

Number of days in court, experts and chemists	88
Number of days obtaining evidence	21
Number of days on special duty	14
Number of days inspecting retail stores	162
Number of days inspecting wholesale stores and manufacturies	41
Total number of days	326

Number of wholesale stores and manufactories inspected	230
Number of barrels and casks of vinegar inspected	5,234
Number of retail stores, vinegar inspected	5,461
Number of barrels and casks of vinegar inspected	12,313
Total number of vinegar inspections	17,517

Number of samples purchased and taken	[illegible]
Number of samples delivered to chemist	22
Number of complaints made	[illegible]
Number of appearances in cases	250
Estimated number of miles traveled	9,685
Number of analyses of samples of vinegar	12
Number of cases prosecuted, criminally	10
Number of civil penalty actions	5
Number of cases defendant absconded	1
Number of convictions	8
Number of civil penalties imposed	4
Number of cases awaiting trial	2
Number of cases disposed of	13

MILK.

Number of days in court, experts and chemists	95
Number of days obtaining evidence	42
Number of days inspecting milk	195
Number of days on special duty	16
Number of days inspecting herds	37
Total number of days	385

Number of stores milk inspected	1,189
Number of cans inspected	3,176
Number of peddlers' milk inspected	360
Number of cans inspected	2,631
Number of dairies and creameries' milk inspected on delivery from railroads and steamboats	8,378
Number of cans inspected	78,394
Total cans inspected	84,201

Number of inspection of stables	54
Number of cows inspected	1,855
Number of samples delivered to chemist	81
Number of complaints made	57
Number of appearances in cases	268
Estimated number of miles traveled	19,074
Number of analyses of samples of milk	81
Number of cases prosecuted, criminal	4
Number of civil penalty actions	63
Number of cases discontinued	1
Absconded	1
Number of convictions	1
Number of civil penalties imposed	55

Number of acquittals	1
Number of cases awaiting trial	8
Number of cases disposed of	59

OLEOMARGARINE.

Number of days in court, experts and chemists	487
Number of days obtaining evidence	65
Number of days on special duty	89
Number of days inspecting stores and bakeries	627
Number of days visiting hotels, restaurants and boarding-houses	201
Total number of days	1,469

Number of samples purchased and taken	3,109
Number of samples delivered to chemist	235
Number of special samples	22
Number of evenings obtaining samples	371
Number of complaints made	184
Number of appearances in cases	1,491
Number of stores and bakeries inspected	31,479
Number of hotels, restaurants and boarding-houses visited	4,990
Estimated number of miles traveled	43,121
Number of analyses of oleomargarine and butter samples	257
Number of cases prosecuted, criminally	114
Number of civil penalty actions	59
Number of cases disposed of	137
Number of cases, sentence suspended	11
Number of civil penalties imposed	47
Number of convictions	79
Number of acquittals	1
Number of cases defendant absconded, criminal	4

Number of cases awaiting trial	36
Number of cases withdrawn	6

The final result of prosecutions under the laws relating to oleomargarine, adulterated milk and vinegar for the year ending September 30, 1899, were as follows:

Cases remaining September 30, 1898:	
Oleomargarine cases	7
Milk cases	6
Vinegar cases	2
Oleomargarine cases prosecuted during the year ending September 30, 1899	173
Milk cases prosecuted during the year ending September 30, 1899	67
Vinegar cases prosecuted during the year ending September 30, 1899	15
Total number of cases	270

Convicted	93
Civil penalties imposed	113
Cases awaiting trial	48
Absconded	6
Discontinued	8
Acquitted	2
Total	270

Prosecutions.

VINEGAR.

CASE No. 1097.

Third District City Magistrate's Court, Far Rockaway.

Warrant issued November 17, 1898; answered to November 23d; adjourned for examination to November 26th; held in bail

for trial at Special Sessions. Called for trial December 27th; adjourned to January 24, 1899; adjourned to February 21st; adjourned to February 28th; adjourned to March 7th; tried, convicted and sentence suspended.

Counsel: W. J. Griffin.

Witnesses: J. M. Esmay, W. C. Patrick.

Chemist: Jos. F. Geisler.

CASE No. 1099.

First District City Magistrate's Court, New Brighton, Staten Island.

Warrant issued November 18, 1898; answered to November 23d; adjourned for examination to December 1st; adjourned to December 8th; to December 15th; held in bail for trial at Special Sessions. Called for trial December 29th; tried and convicted; fined $25.

Counsel: W. J. Griffin.

Witnesses: W. C. Patrick, J. M. Esmay.

Chemist: E. G. Love.

CASE No. 917.

Second District City Magistrate's Court, Staten Island.

Warrant issued November 21, 1898; answered to November 28th; held in bail for trial at Special Sessions. Called for pleading December 1st; adjourned for trial to December 8th; tried and convicted; fined $25.

Counsel: Andrew J. Perry.

Witnesses: J. M. Esmay, W. C. Patrick.

Chemist: Jos. F. Geisler.

CASE No. 2555.

Second District City Magistrate's Court, New York City.

Warrant issued December 20, 1898; absconded before warrant was served.

Counsel: C. G. Macey.

Witnesses: John McGuire, A. D. Clark.

Chemist: Jos. F. Geisler.

CASE No. 2563.

Fifth District City Magistrate's Court, New York City.

Warrant issued January 31, 1899; answered to February 3d; held in bail for trial at Special Sessions. Called for pleading February 9th; adjourned for trial to February 14th; pleaded guilty; fined $25.

Counsel: C. G. Macey.

Witnesses: A. D. Clark, J. H. Bevier.

Chemist: Jos. F. Geisler.

CASE No. 2559.

First District City Magistrate's Court, Staten Island.

Warrant issued December 19, 1898; answered to December 21st; held in bail for trial at Special Sessions. Called for pleading January 5, 1899; adjourned for trial to January 26th; adjourned to February 9th; pleaded guilty; sentence suspended.

Counsel: C. G. Macey.

Witnesses: W. J. Gentes, Charles Sears.

Chemist: E. G. Love.

CASE No. 2556.

First District Municipal Court, New York City.

Civil penalty action; summons and complaint served January 5, 1899; answered to January 12th; case adjourned for trial to February 1st, and discontinued on payment of civil penalty of $25.

Counsel: C. G. Macey.

Witnesses: W. J. Gentes, J. H. Bevier.

Chemist: Jos. F. Geisler.

CASE No. 2565.

Supreme Court, Kings County.

Civil penalty action; summons and complaint served January 16, 1899; action discontinued January 21st on payment of civil penalty of $25 and costs.

Counsel: A. Mathews.

Witnesses: W. J. Gentes, J. H. Bevier.

Chemist: E. G. Love.

CASE No. 2566.

Supreme Court, Kings County.

Civil penalty action; summons and complaint served January 16, 1899; action discontinued January 21st on payment of civil penalty of $25 and costs.

Counsel: A. Mathews.

Witnesses: W. J. Gentes, J. H. Bevier.

Chemist: E. G. Love.

CASE No. 2567.

Second District City Magistrate's Court, Staten Island.

Warrant issued June 1, 1899; returnable June 15th; held in bail for trial at Special Sessions. Called for pleading June 26th; adjourned for trial to June 29th; pleaded guilty; sentence suspended.

Counsel: George P. Nock.

Witnesses: J. H. Bevier, John McGuire.

Chemist: E. G. Love.

CASE No. 2568.

First District City Magistrate's Court, Staten Island.

Warrant issued May 26, 1899; answered to June 1; adjourned for examination to June 6th; adjourned to June 20th; held in bail for trial at Special Sessions. Called for pleading June 22d; adjourned for trial to June 29th; pleaded guilty; fined $25.

Counsel: George P. Nock.

Witnesses: John McGuire, J. H. Bevier.

Chemist: Jos. F. Geisler.

CASE No. 2571.

Second District City Magistrate's Court, Staten Island.

Warrant issued May 26, 1899; answered to May 26th; adjourned for examination to June 1st; held in bail for trial at Special Sessions. Called for pleading June 8th; adjourned for trial to June 22d; adjourned to June 29th; pleaded guilty; fined $25.

Counsel: George P. Nock.

Witnesses: John McGuire, J. H. Bevier.

Chemist: E. G. Love.

CASE No. 2574.

Supreme Court, Kings County.

Civil penalty action; summons and complaint served August 14, 1899; case awaiting trial.

Counsel: Henry Marshall.

Witnesses: J. H. Bevier, W. J. Gentes.

Chemist: Jos. F. Geisler.

CASE No. 2560.

Second District City Magistrate's Court, Staten Island.

Warrant issued August 29, 1899; answered to August 30th; adjourned for examination to August 31st; to September 13th; to September 28th; to October 5th.

Counsel: A. L. Collier.

Witnesses: John McGuire, J. H. Bevier.

Chemist: Jos. F. Geisler.

CASE No. 1358.

Supreme Court, New York County.

Civil penalty action; summons and complaint served February 20, 1899; judgment taken by default on May 15th, for $100 and costs.

Counsel: Fred A. Ware.

Witnesses: J. M. Esmay, W. C. Patrick.

Chemist: Jos. F. Geisler.

Vinegar.

Case No.	COURT.	Place.	Called for trial.	Remarks.
1094....	Special Sessions	New York city.	October 20, 1898	Tried ; convicted ; fined $25.
932...	Special S-ssions	New York city.	November 3, 1898	Pleaded guilty ; fined $25.

MILK.

CASE No. 4578.

Supreme Court, New York County.

Civil penalty action; summons and complaint served November 17, 1898; action discontinued November 23d on payment of civil penalty of $25.

Counsel: Robert Mazet.

Witnesses: A. D. Clark, W. C. Patrick.

Chemist: Jos. F. Geisler.

CASE No. 4577.

Supreme Court, New York County.

Civil penalty action; summons and complaint served October 27, 1898; action discontinued October 29th on payment of civil penalty of $25 and costs.

Counsel: Henry Marshall.

Witnesses: W. C. Patrick, A. D. Clark.

Chemist: Jos. F. Geisler.

CASE No. 8921.

Eleventh District Municipal Court, New York City.

Civil penalty action; summons and complaint served August 18, 1899; returnable August 28th; action discontinued on payment of penalty of $25 and costs.

Counsel: Tiffany & Brush.

Witnesses: John McGuire, Charles Sears.

Chemist: Jos. F. Geisler.

CASE No. 8910.

Supreme Court, New York County.

Civil penalty action; summons and complaint served August 15, 1899; action discontinued August 15th on payment of civil penalty of $50 and costs.

Counsel: F. A. Ware.

Witnesses: W. J. Gentes, Charles Sears.

Chemist: Jos. F. Geisler.

CASE No. 7674.

Supreme Court, New York County.

Civil penalty action; summons and complaint served August 17, 1899; action discontinued August 17th on payment of civil penalty of $25 and costs.

Counsel: Barton L. Case.

Witnesses: W. C. Patrick, John McGuire.

CASE No. 7667.

Ninth District Municipal Court, New York City.

Civil penalty action; summons and complaint served August 31, 1899; returnable September 8th; adjourned for trial to September 19th; adjourned to September 26th; adjourned to October 6th.

Counsel: James G. Pearsoll.

Witnesses: W. C. Patrick, John McGuire.

Chemist: E. G. Love.

CASE No. 8901.

Supreme Court, New York County.

Civil penalty action; summons and complaint served September 12, 1899; action discontinued September 12th on payment of civil penalty of $25 and costs.

Counsel: William G. Brown.

Witnesses: Chas. Sears, John McGuire.

Chemist: E. G. Love.

CASE No. 7645.

Supreme Court, New York County.

Civil penalty action; summons and complaint served August 21, 1899; action discontinued August 21st on payment of civil penalty of $50 and costs.

Counsel: Armitage Mathews.

Witnesses: A. D. Clark, J. M. Esmay.

Chemist: E. G. Love.

CASE No. 8923.

Supreme Court, New York County.

Civil penalty action; summons and complaint served August 18, 1899; answered to August 30th; action discontinued on payment of $25 and costs.

Counsel: Tiffany & Brush.

Witnesses: Charles Sears, W. J. Gentes.

Chemist: E. G. Love.

CASE No. 8926.

Supreme Court, New York County.

Civil penalty action; summons and complaint served August 18, 1899; action discontinued September 11th on payment of civil penalty of $25 and costs.

Counsel: Tiffany & Brush.

Witnesses: W. J. Gentes, Charles Sears.

Chemist: E. G. Love.

CASE No. 7662.

Second District Municipal Court, New York City.

Civil penalty action; summons and complaint served August 30, 1899; action discontinued August 31st on payment of civil penalty of $25 and costs.

Counsel: James G. Pearsoll.

Witnesses: W. C. Patrick, W. J. Gentes.

Chemist: E. G. Love.

CASE No. 7675.

Supreme Court, New York County.

Civil penalty action; summons and complaint served August 10, 1899; action discontinued August 10th on payment of civil penalty of $25 and costs.

Counsel: William G. Brown.

Witnesses: J. M. Esmay, John McGuire.

Chemist: Jos. F. Geisler.

CASE No. 4580.

Supreme Court, New York County.

Civil penalty action; summons and complaint served October 16, 1898; action discontinued October 20th on payment of civil penalty of $25 and costs.

Counsel: Henry Marshall.

Witnesses: J. M. Esmay, W. C. Patrick.

Chemist: J. F. Geisler.

CASE No. 4618.

Supreme Court, New York County.

Civil penalty action; summons and complaint served November 25, 1898; action discontinued December 19th on payment of civil penalty of $100 and costs.

Counsel: Robert Mazet.

Witnesses: J. M. Esmay, Charles Sears.

Chemist: J. F. Geisler.

CASE No. 4610.

Supreme Court, New York County.

Civil penalty action; summons and complaint served October 14, 1898; action discontinued October 15th on payment of civil penalty of $25 and costs.

Counsel: Robert Mazet.

Witnesses: Charles Sears, John McGuire.

Chemist: J. F. Geisler.

CASE No. 752.

Supreme Court, New York County.

Civil penalty action; summons and complaint served November 26, 1898; action discontinued November 26th on payment of civil penalty of $25 and costs.

Counsel: Andrew J. Perry.

Witnesses: Charles Sears, John McGuire.

Chemist: J. F. Geisler.

CASE No. 4570.

Supreme Court, New York County.

Civil penalty action; summons and complaint, October 3, 1898; action discontinued October 3d on payment of civil penalty, $25 and costs.

Counsel: Andrew J. Perry.

Witnesses: John McGuire, W. C. Patrick.

Chemist: J. F. Geisler.

CASE No. 4609.

Supreme Court, New York County.

Civil penalty action; summons and complaint served October 1, 1898; action discontinued October 19th on payment of civil penalty of $25 and costs.

Counsel: Robert Mazet.

Witnesses: A. D. Clark, John McGuire.

Chemist: J. F. Geisler.

CASE No. 4600.

Supreme Court, New York County.

Civil penalty action; summons and complaint served March 23, 1899; answered to April 4th; case awaiting trial.

Counsel: Robert Mazet.

Witnesses: A. D. Clark, Charles Sears.

Chemist: E. G. Love.

CASE No. 4591.

Fourth District City Magistrate's Court, New York City.

Warrant issued October 19, 1898; answered to October 21st; held in bail for trial at Special Sessions. Called for pleading November 3d; adjourned for trial to November 9th; case transferred to General Sessions; before grand jury December 9, 1898; indicted; case called for trial February 21, 1899; adjourned to April 17th; to April 24th; to June 9th; to June 16th; to October 5th.

Counsel: C. G. Macy.

Witnesses: J. M. Esmay, J. McGuire.

Chemist: J. F. Geisler.

CASE No. 4587.

Supreme Court, New York County.

Civil penalty action; summons and complaint served October 12, 1898; action discontinued October 12th on payment of civil penalty of $25 and costs.

Counsel: H. M. Heymann.

Witnesses: J. M. Esmay, John McGuire.

Chemist: J. F. Geisler.

CASE No. 4590.

Supreme Court, New York County.

Civil penalty action; summons and complaint served October 1, 1898; action discontinued October 1st on payment of civil penalty of $25 and costs.

Counsel: L. Andrews.

Witnesses: W. C. Patrick, A. D. Clark.

Chemist: J. F. Geisler.

CASE No. 4596.

Fifth District City Magistrate's Court, New York City.

Warrant issued October 20, 1898; answered to October 25th; held in bail for trial at Special Sessions. Called for pleading November 3d; adjourned for trial November 10th; tried, convicted and adjourned for sentence to November 14th; case called; fined $350, or three months in the City Prison.

CASE No. 4630.

Sixth District City Magistrate's Court, New York City.

Warrant issued October 26, 1898; answered to October 28th; held in bail for trial at Special Sessions. Called for pleading

November 30th; adjourned for trial to December 7th; adjourned to December 16th; tried and acquitted.

Counsel: W. J. Griffin.

Witnesses: J. McGuire, A. D. Clark and Charles Sears.

Chemist: E. G. Love.

CASE No. 4633.

Supreme Court, New York County.

Civil penalty action; summons and complaint served December 19, 1898; action discontinued December 19th on payment of civil penalty of $25 and costs.

Counsel: H. M. Heymann.

Witnesses: J. M. Esmay, J. McGuire.

Chemist: J. F. Geisler.

CASE No. 4635.

Supreme Court, New York County.

Civil penalty action; summons and complaint served October 3, 1898; action discontinued on October 3d on payment of civil penalty of $25 and costs.

Counsel: C. J. Macy.

Witnesses: J. M. Esmay, A. D. Clark.

Chemist: Jos. F. Geisler.

CASE No. 4584.

Supreme Court, New York County.

Civil penalty action; summons and complaint served December 8, 1898; answered to January 9, 1899; case placed upon preferred calendar March 6th; awaiting trial.

Counsel: F. A. Ware.

Witnesses: J. M. Esmay, John McGuire.

Chemist: Jos. F. Geisler.

CASE No. 7607.

Supreme Court, Kings County.

Civil penalty action; summons and complaint served October 14, 1898; action discontinued October 14th on payment of civil penalty of $25 and costs.

Counsel: C. G. Macy.

Witnesses: John McGuire, J. M. Esmay.

Chemist: Jos. F. Geisler.

CASE No. 4643.

Supreme Court, New York County.

Civil penalty action; summons and complaint served January 17, 1899; answered to February 6th; on calendar awaiting trial.

Counsel: Henry Marshall.

Witnesses: John McGuire, William J. Gentes.

Chemist: J. F. Geisler.

CASE No. 4650.

Supreme Court, New York County.

Civil penalty action; summons and complaint served October 4, 1898; action discontinued October 4th on payment of civil penalty of $50 and costs.

Counsel: W. H. Van Benschoten.

Witnesses: W. J. Gentes, Charles Sears.

Chemist: J. F. Geisler.

CASE No. 4644.

Supreme Court, New York County.

Civil penalty action; summons and complaint served October 4, 1898; action discontinued October 4th on payment of civil penalty of $50 and costs.

Counsel: W. H. Van Benschoten.

Witnesses: W. J. Gentes, John McGuire.

Chemist: J. F. Geisler.

CASE No. 4634.

Supreme Court, Kings County.

Civil penalty action; summons and complaint, October 4, 1898; action discontinued on payment of civil penalty of $25.

Counsel: W. J. Griffin.

Witnesses: Charles Sears, A. D. Clark.

Chemist: J. F. Geisler.

CASE No. 7627.

Second District City Magistrate's Court, New York City.

Warrant issued June 23, 1899; absconded before warrant was served.

Counsel: Benjamin Oppenheimer.

Witnesses: J. H. Bevier, Charles Sears.

Chemist: J. F. Geisler.

CASE No. 7658.

Supreme Court, New York County.

Civil penalty action; summons and complaint served July 17, 1899; action discontinued July 18 on payment of civil penalty of $25 and costs.

Counsel: Robert Mazet.

Witnesses: John McGuire, J. H. Bevier.

Chemist: E. G. Love.

CASE No. 7611.

Supreme Court, New York County.

Civil penalty action; summons and complaint served July 29, 1899; action discontinued September 12th on payment of civil penalty of $25 and costs.

Counsel: Robert Mazet.

Witnesses: W. C. Patrick, J. M. Esmay.

Chemist: E. G. Love.

CASE No. 7631.

Supreme Court, New York County.

Civil penalty action; summons and complaint, July 19, 1899; action discontinued July 20th on payment of civil penalty of $25 and costs.

Counsel: Robert Mazet.

Witnesses: A. D. Clark, W. J. Gentes.

Chemist: E. G. Love.

CASE No. 7635.

Supreme Court, New York County.

Civil penalty action; summons and complaint served August 16, 1899; action discontinued September 6th on payment of civil penalty of $50 and costs.

Counsel: Robert Mazet.

Witnesses: A. D. Clark, J. M. Esmay.

Chemist: E. G. Love.

CASE No. 7644.

Supreme Court, New York County.

Civil penalty action; summons and complaint served July 19, 1899; action discontinued July 25th on payment of civil penalty of $75 and costs.

Counsel: Robert Mazet.

Witnesses: A. D. Clark, J. H. Bevier.

Chemist: E. G. Love.

CASE No. 7614.

Supreme Court, New York County.

Civil penalty action; summons and complaint served July 19, 1899; action discontinued July 27th on payment of civil penalty of $50 and costs.

Counsel: S. S. Slater.

Witnesses: W. J. Gentes, Charles Sears.

Chemist: E. G. Love.

CASE No. 7636.

Supreme Court, New York County.

Civil penalty action; summons and complaint served July 25, 1899; action discontinued July 27th on payment of penalty of $25 and costs.

Counsel: S. S. Slater.

Witnesses: W. J. Gentes, W. C. Patrick.

Chemist: E. G. Love.

CASE No. 7639.

Supreme Court, New York County.

Civil penalty action; summons and complaint served July 19, 1899; action discontinued July 27th on payment of civil penalty of $50 and costs.

Counsel: S. S. Slater.
Witnesses: W. J. Gentes, Charles Sears.
Chemist: E. G. Love.

CASE No. 7664.

Supreme Court, New York County.

Civil penalty action; summons and complaint served July 19th, 1899; action discontinued July 27th on payment of civil penalty of $50 and costs.

Counsel: E. H. Fallows.
Witnesses: W. J. Gentes, Charles Sears.
Chemist: E. G. Love.

CASE No. 7628.

Supreme Court, New York County.

Civil penalty action; summons and complaint served September 15, 1899; returnable the 5th of October.

Counsel: E. H. Fallows.
Witnesses: J. H. Bevier, John McGuire.
Chemist: E. G. Love.

CASE No. 7601.

Supreme Court, New York County.

Civil penalty action; summons and complaint served July 21, 1899; action discontinued August 10th on payment of civil penalty of $50 and costs.

Counsel: Benjamin Oppenheimer.
Witnesses: J. M. Esmay, W. C. Patrick.
Chemist: E. G. Love.

CASE No. 7634.

Supreme Court, New York County.

Civil penalty action; summons and complaint served August 22, 1899; action discontinued September 11th on payment of civil penalty of $25 and costs.

Counsel: Benjamin Oppenheimer.

Witnesses: J. M. Esmay, W. C. Patrick.

Chemist: E. G. Love.

CASE No. 7640.

Supreme Court, New York County.

Civil penalty action; summons and complaint served July 17, 1899; action discontinued August 6th on payment of civil penalty of $25 and costs.

Counsel: Benjamin Oppenheimer.

Witnesses: J. M. Esmay, A. D. Clark.

Chemist: E. G. Love.

CASE No. 7629.

Supreme Court, New York County.

Civil penalty action; summons and complaint served July 26, 1899; action discontinued July 31st on payment of civil penalty of $50.

Counsel: A. J. Perry.

Witnesses: J. M. Esmay, A. D. Clark.

Chemist: E. G. Love.

CASE No. 7661.

Supreme Court, Kings County.

Civil penalty action; summons and complaint served July 26, 1899; action discontinued August 11th on payment of civil penalty of $25 and costs.

Counsel: Henry Marshall.
Witnesses: J. M. Esmay, A. D. Clark.
Chemist: E. G. Love.

CASE No. 7613.

Ninth District Municipal Court, New York City.

Civil penalty action; summons and complaint served July 27, 1899; action discontinued July 28th on payment of civil penalty of $50 and costs.

Counsel: J. T. Williamson.
Witnesses: Charles Sears, W. J. Gentes.
Chemist: E. G. Love.

CASE No. 7615.

Fourth District Municipal Court, New York City.

Civil penalty action; summons and complaint served July 26, 1899; action discontinued July 28th on payment of civil penalty of $40 and costs.

Counsel: J. T. Williamson.
Witnesses: Charles Sears, W. J. Gentes.
Chemist: E. G. Love.

CASE No. 7665.

Supreme Court, Kings County.

Civil penalty action; summons and complaint served August 14, 1899; returnable October 20, 1899.

Counsel: Henry Marshall.
Witnesses: Charles Sears, W. J. Gentes.
Chemist: E. G. Love.

CASE No. 7671.

Supreme Court, Kings County.

Civil penalty action; summons and complaint served August 15, 1899; action discontinued August 23d on payment of costs by defendant.

Counsel: Henry Marshall.

Witnesses: Charles Sears, W. J. Gentes.

Chemist: E. G. Love.

CASE No. 8916.

Supreme Court, Kings County.

Civil penalty action; summons and complaint served August 21, 1899; action discontinued August 21st on payment of civil penalty of $30.

Counsel: George W. Albright.

Witnesses: W. C. Patrick, A. D. Clark.

Chemist: E. G. Love.

CASE No. 8909.

Supreme Court, New York County.

Civil penalty action; summons and complaint served August 19, 1899: action discontinued August 19th on payment of civil penalty of $50 and costs.

Counsel: F. A. Ware.

Witnesses: W. J. Gentes, Charles Sears.

Chemist: Jos. F. Geisler.

CASE No. 7672.

Supreme Court, New York County.

Civil penalty action; summons and complaint served August 18, 1899; action discontinued August 18th on payment of civil penalty of $50 and costs.

Counsel: B. L. Case.

Witnesses: Charles Sears, W. J. Gentes.

Chemist: Jos. F. Geisler.

CASE No. 7669.

Supreme Court, New York County.

Civil penalty action; summons and complaint served August 15, 1899; action discontinued August 15th on payment of civil penalty of $50 and costs.

Counsel: Reese G. Gwillim.

Witnesses: Charles Sears, W. J. Gentes.

Chemist: Jos. F. Geisler.

CASE No. 7668.

Ninth District Municipal Court, New York City.

Civil penalty action; summons and complaint served July 27, 1899; action discontinued July 28th on payment of civil penalty of $50 and costs.

Counsel: Reese R. Gwillim.

Witnesses: Charles Sears, W. J. Gentes.

Chemist: Jos. F. Geisler.

CASE No. 8920.

Eleventh District Municipal Court, New York City.

Civil penalty action; summons and complaint served August 31, 1899; returnable the 8th day of September; judgment for plaintiff of $40 and costs.

Counsel: Tiffany & Brush.

Witnesses: Charles Sears, John McGuire.

Chemist: Jos. F. Geisler.

CASE No. 7670.

Supreme Court, New York County.

Civil penalty action; summons and complaint served August 18, 1899; action discontinued August 18th on payment of civil penalty of $50 and costs.

Counsel: Barton L. Case.

Witnesses: Charles Sears, W. J. Gentes.

Chemist: Jos. F. Geisler.

CASE No. 8914.

Supreme Court, New York County.

Civil penalty action; summons and complaint served September 8, 1899.

Counsel: Fred. A. Ware.

Witnesses: A. D. Clark, W. C. Patrick.

Chemist: Jos. F. Geisler.

CASE No. 7626.

Supreme Court, New York County.

Civil penalty action; summons and complaint served June 14, 1899; action discontinued June 18th on payment of cival penalty of $100 and costs.

Counsel: S. S. Slater.

Witnesses: Chas. Sears, J. H. Bevier.

Chemist: Jos. F. Geisler.

CASE No. 7602.

Supreme Court, New York County.

Civil penalty action; summons and complaint served July 25, 1899; action discontinued on payment of civil penalty of $25.

Counsel: W. M. Tyler.
Witnesses: John McGuire, J. H. Bevier.
Chemist: E. G. Love.

CASE No. 7641.

Supreme Court, New York County.

Civil penalty action; summons and complaint served July 19, 1899; action discontinued on July 25th on payment of civil penalty of $100.

Counsel: W. M. Tyler.
Witnesses: John McGuire, J. H. Bevier.
Chemist: E. G. Love.

CASE No. 8915.

Supreme Court, New York County.

Civil penalty action; summons and complaint served September 6, 1899; action discontinued on payment of civil penalty of $25.

Counsel: George W. Albright.
Witnesses: W. C. Patrick, J. M. Esmay.
Chemist: E. G. Love.

CASE No. 8918.

Supreme Court, New York County.

Civil penalty action; summons and complaint served August 9, 1899; action discontinued on payment of civil penalty of $50.

Counsel: George W. Albright.
Witnesses: W. C. Patrick, W. J. Gentes.
Chemist: E. G. Love.

CASE No. 7624.

Supreme Court, New York County.

Civil penalty action; summons and complaint served June 21, 1899; action discontinued on payment of civil penalty of $100.

Counsel: George W. Albright.

Witnesses: Chas. Sears, J. H. Bevier.

Chemist: Jos. F. Geisler.

CASE No. 7625.

Supreme Court, New York County.

Civil penalty action; summons and complaint served June 18, 1899; action discontinued June 22d on payment of penalty of $100 and costs.

Counsel: S. S. Slater.

Witnesses: Chas. Sears, W. J. Gentes.

Chemist: Jos. F. Geisler.

Milk.

Case No.	COURT.	Place.	Called for trial.	Remarks.
4608. ..	Supreme	New York Co..	October 6, 1898	Action discontinued on payment of civil penalty of $25 and costs.
4594....	Special Sessions	New York city.	December 12, 1898	Pleaded guilty ; fined $100.
4585....	.....	....	October 15, 1898	Action discontinued on payment of civil penalty of $25.
4638 ...	....	.....	October 15, 1898	Action discontinued on payment of civil penalty of $25.
4597...	... .	.....	October 15, 1898	Action discontinued on payment of civil penalty of $25.
4631 ...	....	.....	October 15, 1898	Action discontinued on payment of civil penalty of $25.

OLEOMARGARINE.

CASE No. 2457.

Seventh District City Magistrate's Court, New York City.

Warrant issued November 20, 1898; answered to November 22d; adjourned for examination to November 25th; held in bail for trial at Special Sessions. Called for pleading November 30; adjourned for trial to February 7, 1899; pleaded guilty; fined $50.

Counsel: A. J. Perry.

Witnesses: J. M. Esmay, A. D. Clark.

Chemist: E. G. Love.

CASE No. 2544.

Seventh District Municipal Court, New York City.

Civil penalty action; summons and complaint served December 1, 1898; returnable December 9th. Case adjourned for trial to December 22d; tried; judgment for people of $50 and costs.

Counsel: Benjamin Oppenheimer.

Witnesses: W. C. Patrick, A. D. Clark.

Chemist: E. G. Love.

CASE No. 2434.

Supreme Court, New York County.

Civil penalty action; summons and complaint served February 21, 1899; awaiting trial.

Counsel: Hal Bell.

Witnesses: W. C. Patrick, W. J. Gentes.

Chemist: E. G. Love.

CASE No. 2481.

Third District City Magistrate's Court, Brooklyn.

Warrant issued February 11, 1899; answered to February 13th; held in bail for trial at Special Sessions. Called for pleading March 29th; adjourned for trial to April 5th; to April 12th; pleaded guilty; fined $25.

Counsel: C. G. Macy.

Witnesses: John McGuire, Chas. Sears.

Chemist: Jos. F. Geisler.

CASE No. 2433.

Third District Municipal Court, New York City.

Civil penalty action; summons and complaint served February 23, 1899; action discontinued March 1st on payment of civil penalty of $25 and costs.

Counsel: M. Linn Bruce.

Witnesses: A. D. Clark, J. H. Bevier.

Chemist: E. G. Love.

CASE No. 2479.

Second District City Magistrate's Court, New York City.

Warrant issued February 20, 1899; answered to February 21st; held in bail for trial at Special Sessions. Called for pleading March 2d; adjourned for trial to March 10th; pleaded guilty; fined $25.

Counsel: C. G. Macy.

Witnesses: A. D. Clark, J. H. Bevier.

Chemist: E. G. Love.

CASE No. 2468.

Fourth District City Magistrate's Court, New York City.

Warrant issued December 19, 1898; answered to December 20th; adjourned for examination to December 21st; held in bail

for trial at Special Sessions. Called for pleading January 5, 1899; adjourned for trial to January 12th; pleaded guilty; fined $25.

Counsel: Benj. Oppenheimer.

Witnesses: Chas. Sears, W. J. Gentes.

Chemist: Jos. F. Geisler.

CASE No. 2472.

Seventh District Municipal Court, New York City.

Civil penalty action; summons and complaint served December 27, 1898; action discontinued January 3, 1899, on payment of civil penalty of $50 and costs.

Counsel: Benj. Oppenheimer.

Witnesses: Chas. Sears, W. J. Gentes.

Chemist: Jos. F. Geisler.

CASE No. 2423.

Second District City Magistrate's Court, Brooklyn.

Warrant issued December 30, 1898; answered to January 4, 1899; held in bail for trial at Special Sessions. Called for pleading January 30th; pleaded guilty; fined $25.

Counsel: Albert R. Moore.

Witnesses: W. J. Gentes, J. H. Bevier.

Chemist: E. G. Love.

CASE No. 2455.

First District City Magistrate's Court, Staten Island.

Warrant issued December 16, 1898; answered to December 21st; held in bail for trial at Special Sessions. Called for trial December 29th; tried, convicted; fined $25.

Counsel: Benj. Oppenheimer.

Witnesses: Chas. Sears, W. J. Gentes.

Chemist: Jos. F. Geisler.

CASE No. 2467.

First District City Magistrate's Court, Brooklyn.

Warrant issued December 16, 1898; answered to December 17th; held in bail for trial at Special Sessions. Called for trial January 30, 1899; pleaded guilty; fined $25.

Counsel: H. M. Heymann.

Witnesses: W. J. Gentes, John McGuire.

Chemist: Jos. F. Geisler.

CASE No. 2424.

Second District City Magistrate's Court, Brooklyn.

Warrant issued March 8, 1899; answered to March 9th; held in bail for trial at Special Sessions. Called for pleading March 29th; pleaded guilty; fined $50.

Counsel: Henry Marshall.

Witnesses: W. J. Gentes, J. H. Bevier.

Chemist: E. G. Love.

CASE No. 2458.

First District City Magistrate's Court, Staten Island.

Warrant issued December 19, 1898; answered to December 23d; held in bail for trial at Special Sessions. Called for trial January 3, 1899; adjourned to January 26th; tried; convicted; fined $50.

Counsel: H. M. Heymann.

Witnesses: W. J. Gentes, W. C. Patrick.

Chemist: Jos. F. Geisler.

CASE No. 2545.

Sixth District City Magistrate's Court, New York City.

Warrant issued February 15, 1899; absconded before warrant was served.

Counsel: W. J. Griffin.

Witnesses: A. D. Clark, J. H. Bevier.

Chemist: Jos. F. Geisler.

CASE No. 2425.

First District City Magistrate's Court, Long Island City.

Warrant issued February 1, 1899; answered to February 2d; adjourned for examination to February 14th; adjourned to February 23d; held in bail for trial at Special Sessions. Called for pleading March 7th; pleaded guilty; fined $25.

Counsel: Albert R. Moore.

Witnesses: A. D. Clark, J. M. Esmay.

Chemist: E. G. Love.

CASE No. 2470.

Fifth District City Magistrate's Court, New York City.

Warrant issued January 20, 1899; answered to January 23d; held in bail for trial at Special Sessions. Called for pleading January 26th; adjourned for trial to March 3d; pleaded guilty; fined $25.

Counsel: W. J. Griffin.

Witnesses: A. D. Clark, J. H. Bevier.

Chemist: Jos. F. Geisler.

CASE No. 2535.

First District City Magistrate's Court, Long Island City.

Warrant issued October 27, 1898; answered to October 28th; adjourned for examination to November 4th; adjourned to No-

vember 14th; to November 21st; to November 29th. Case discontinued, upon advice of counsel, owing to lack of sufficient evidence.

Counsel: Robert Mazet.

Witnesses: W. C. Patrick, J. M. Esmay.

Chemist: Jos. F. Geisler.

CASE No. 2469.

Third District City Magistrate's Court, Brooklyn.

Warrant issued December 20, 1898; answered to December 21st; held in bail for trial at Special Sessions. Called for pleading December 30th; adjourned for trial to January 30, 1899; pleaded guilty; fined $25.

Counsel: H. M. Heymann.

Witnesses: John McGuire, W. J. Gentes.

Chemist: Jos. F. Geisler.

CASE No. 2617.

Second District City Magistrate's Court, New York City.

Warrant issued March 8, 1899; answered to March 10th; held in bail for trial at Special Sessions. Called for pleading April 10th; pleaded guilty; fined $25.

Counsel: Armitage Mathews.

Witnesses: J. M. Esmay, A. D. Clark.

Chemist: Jos. F. Geisler.

CASE No. 2615.

Supreme Court, Kings County.

Civil penalty action; summons and complaint served February 21, 1899; case still pending.

Counsel: Armitage Mathews.

Witnesses: W. J. Gentes, A. D. Clark.

Chemist: Jos. F. Geisler.

CASE No. 2609.

Second District City Magistrate's Court, Brooklyn.

Warrant issued February 21, 1899; answered to February 23d; adjourned for examination to February 28th; adjourned to March 8th; to March 15th; held in bail for trial at Special Sessions. Called for pleading March 29th; adjourned for trial to April 7th; to April 14th; pleaded guilty; fined $25.

Counsel: Armitage Mathews.

Witnesses: W. J. Gentes, A. D. Clark.

Chemist: Jos. F. Geisler.

CASE No. 3366.

Third District Municipal Court, Brooklyn.

Civil penalty action; summons and complaint served February 17, 1899; returnable February 24th; adjourned for trial to March 15th; judgment rendered for the people for $25 and costs.

Counsel: Geo. Tiffany.

Witnesses: W. J. Gentes, J. H. Bevier.

Chemist: Jos. F. Geisler.

CASE No. 3372.

Seventh District City Magistrate's Court, New York City.

Warrant issued March 1, 1899; answered to March 4th; held in bail for trial at Special Sessions. Called for pleading March 9th; adjourned for trial to May 5th; pleaded guilty; fined $25.

Counsel: Robert Mazet.

Witnesses: A. D. Clark, M. T. Morgan.

Chemist: Jos. F. Geisler.

CASE No. 3373.

First District City Magistrate's Court, New York City.

Warrant issued May 11, 1899; answered to May 12th; adjourned for examination to May 19th; held in bail for trial at Special Sessions. Called for pleading June 2d; adjourned for trial to June 7th; tried; convicted; fined $25.

Counsel: Robert Mazet.

Witnesses: Chas. Sears, J. J. Coughlin and C. J. Standart.

Chemist: E. G. Love.

CASE No. 2499.

Supreme Court, New York County.

Civil penalty action; summons and complaint served February 22, 1899; action discontinued May 2d on payment of civil penalty of $25.

Counsel: F. A. Ware.

Witnesses: W. C. Patrick, J. M. Esmay.

Chemist: E. G. Love.

CASE No. 2613.

Seventh District City Magistrate's Court, New York City.

Warrant issued February 27, 1899; defendant absconded before warrant was served.

Counsel: M. Linn Bruce.

Witnesses: Chas. Sears, J. J. Coughlin and C. J. Standart.

Chemist: Jos. F. Geisler.

CASE No. 2614.

Supreme Court, New York County.

Civil penalty action; summons and complaint served May 5, 1899; action discontinued May 27th on payment of civil penalty of $25 and costs.

Counsel: Robert Mazet.

Witnesses: Chas. Sears, W. J. Gentes.

Chemist: Jos. F. Geisler.

CASE No. 3367.

Fourth District Municipal Court, Brooklyn.

Civil penalty action; summons and complaint served February 15, 1899; action discontinued February 24th on payment of civil penalty of $100.

Counsel: Geo. Tiffany.

Witnesses: W. J. Gentes, J. H. Bevier.

Chemist: Jos. F. Geisler.

CASE No. 3368.

Second District City Magistrate's Court, Brooklyn.

Warrant issued February 11, 1899; answered to February 23d; held in bail for trial at Special Sessions. Called for pleading March 17th; adjourned for trial March 27th; pleaded guilty; fined $50.

Counsel: Geo. Tiffany.

Witnesses: W. J. Gentes, J. M. Esmay.

Chemist: E. G. Love.

CASE No. 2612.

Third District Municipal Court, Brooklyn.

Civil penalty action: summons and complaint served March 1, 1899; returnable March 10th; adjourned for trial to March 30th; tried by jury; verdict for the people for $25 and costs.

Counsel: Geo. Tiffany.

Witnesses: A. D. Clark, W. J. Gentes.

Chemist: Jos. F. Geisler.

CASE No. 3360.

Sixth District City Magistrate's Court, Brooklyn.

Warrant issued February 21, 1899; answered to February 23d; adjourned for examination to February 27th; held in bail for trial at Special Sessions. Called for pleading March 17th; adjourned for trial to March 27th; pleaded guilty; sentence suspended.

Counsel: F. A. Ware.

Witnesses: A. D. Clark, W. J. Gentes.

Chemist: Jos. F. Geisler.

CASE No. 2605.

Seventh District City Magistrate's Court, New York City.

Warrant issued February 23, 1899; answered to February 24th; held in bail for trial at Special Sessions. Called for pleading March 2d; pleaded guilty; fined $25.

Counsel: Fred. A. Ware.

Witnesses: J. M. Esmay, W. J. Gentes.

Chemist: Jos. F. Geisler.

CASE No. 2618.

Second District City Magistrate's Court, New York City.

Warrant issued March 1, 1899; answered to March 3d; held in bail for trial at Special Sessions. Called for pleading March 9th; adjourned for trial to March 14th; to April 6th; to April 12th; pleaded guilty; fined $25.

Counsel: Robert Mazet.

Witnesses: A. D. Clark, J. M. Esmay.

Chemist: Jos. F. Geisler.

CASE No. 2607.

Seventh District City Magistrate's Court, New York City.

Warrant issued March 13, 1899; answered to March 15th; held in bail for trial at Special Sessions. Called for pleading March 23d; adjourned for trial to April 12th; adjourned to May 5th; to June 2d; to June 6th; tried; convicted; fined $25.

Counsel: S. S. Slater.

Witnesses: Chas. Sears, J. J. Coughlin and C. J. Standart.

Chemist: Jos. F. Geisler.

CASE No. 3351.

Second District City Magistrate's Court, New York City.

Warrant issued March 6, 1899; answered to March 7th; held in bail for trial at Special Sessions. Called for pleading March 17th; adjourned for trial to March 24th; pleaded guilty; sentence suspended.

Counsel: Hal Bell.

Witnesses: Chas. Sears, J. J. Coughlin and C. J. Standart.

Chemist: Jos. F. Geisler.

CASE No. 3352.

Second District City Magistrate's Court, New York City.

Warrant issued March 6, 1899; answered to March 7th; held in bail for trial at Special Sessions. Called for pleading March 17th; adjourned for trial to March 24th; pleaded guilty; sentence suspended.

Counsel: Hal Bell.

Witnesses: Chas. Sears, J. J. Coughlin and C. J. Standart.

Chemist: Jos. F. Geisler.

CASE No. 2601.

Second District City Magistrate's Court, Brooklyn.

Warrant issued February 17, 1899; answered to February 20th; adjourned for examination to February 23d; to February 28th; held in bail for trial at Special Sessions. Called for pleading March 17th; pleaded guilty; sentence suspended.

Counsel: F. A. Ware.

Witnesses: W. J. Gentes, J. M. Esmay.

Chemist: E. G. Love.

CASE No. 2624.

Sixth District City Magistrate's Court, Brooklyn.

Warrant issued February 10, 1899; answered to February 20th; held in bail for trial at Special Sessions. Called for pleading March 29th; adjourned to April 7th; tried; convicted; fined $25.

Counsel: H. H. Kellogg.

Witnesses: J. M. Esmay, W. J. Gentes.

Chemist: E. G. Love.

CASE No. 2620.

Fourth District Municipal Court, Brooklyn.

Summons and complaint served February 11, 1899; answered to February 17th; adjourned for trial to March 6th; tried by jury; verdict in favor of defendant; appealed to Appellate Division March 27th; argued before the Appellate Court June 16th; judgment reversed October 21st; notice for new trial given.

Counsel: H. H. Kellogg.

Witnesses: J. M. Esmay, W. J. Gentes.

Chemist: E. G. Love.

CASE No. 3355.

Third District Municipal Court, Brooklyn.

Civil penalty action; summons and complaint served February 20, 1899; action discontinued February 25th on payment of civil penalty of $55 and costs.

Counsel: H. H. Kellogg.

Witnesses: W. J. Gentes, A. D. Clark.

Chemist: Jos. F. Geisler.

CASE No. 3369.

Second District City Magistrate's Court, Brooklyn.

Warrant issued February 11, 1899; answered to February 15th; adjourned for examination to February 23d; to March 1st; held in bail for trial at Special Sessions. Called for pleading March 17th; adjourned for trial to March 27th; pleaded guilty; fined $25.

Counsel: H. H. Kellogg.

Witnesses: W. J. Gentes, J. M. Esmay.

Chemist: Jos. F. Geisler.

CASE No. 2626.

Sixth District City Magistrate's Court, Brooklyn.

Warrant issued March 8, 1899; answered to March 9th; adjourned for examination to March 21st; to March 28th; held in bail for trial at Special Sessions. Called for pleading April 5th; adjourned for trial to April 12th; adjourned to April 14th; to April 17th; pleaded guilty; fined $25.

Counsel: Armitage Mathews.

Witnesses: J. M. Esmay, W. J. Gentes.

Chemist: Jos. F. Geisler.

CASE No. 3359.

Second District City Magistrate's Court, Brooklyn.

Warrant issued February 21, 1899; answered to February 23d; adjourned for examination February 28th; held in bail for trial at Special Sessions. Called for pleading March 17th; adjourned for trial to March 24th; pleaded guilty; fined $25.

Counsel: M. Linn Bruce.

Witnesses: W. J. Gentes, A. D. Clark.

Chemist: Jos. F. Geisler.

CASE No. 3361.

Sixth District City Magistrate's Court, Brooklyn.

Warrant issued February 21, 1899; answered to February 23d; adjourned for examination to February 27th; held in bail for trial at Special Sessions. Called for pleading March 17th; pleaded guilty; fined $40.

Counsel: M. Linn Bruce.

Witnesses: A. D. Clark, W. J. Gentes.

Chemist: Jos. F. Geisler.

CASE No. 3358.

Supreme Court, Kings County.

Civil penalty action; summons and complaint served March 9, 1899; action discontinued March 30th on payment of civil penalty of $25 and costs.

Counsel: M. Linn Bruce.

Witnesses: A. D. Clark, W. J. Gentes.

Chemist: Jos. F. Geisler.

CASE No. 2496.

Sixth District City Magistrate's Court, Brooklyn.

Warrant issued February 24, 1899; answered to February 25th; held in bail for trial at Special Sessions. Called for pleading March 24th; pleaded guilty; fined $25.

Counsel: M. Linn Bruce.

Witnesses: W. C. Patrick, J. M. Esmay.

Chemist: Jos. F. Geisler.

CASE No. 2616.

Fifth District City Magistrate's Court, New York City.

Warrant issued March 2, 1899; answered to March 3d; held in bail for trial at Special Sessions. Called for pleading March 9th; pleaded guilty; fined $50.

Counsel: M. Linn Bruce.

Witnesses: Chas. Sears, J. J. Coughlin and C. J. Standart.

Chemist: E. G. Love.

CASE No. 2500.

Seventh District City Magistrate's Court, New York City.

Warrant issued March 8, 1899; answered to March 10th; held in bail for trial at Special Sessions. Called for pleading April 5th; adjourned for trial to April 12th; pleaded guilty; sentence suspended.

Counsel: Hal Bell.

Witnesses: J. M. Esmay, W. J. Gentes.

Chemist: Jos. F. Geisler.

CASE No. 3353.

Seventh District City Magistrate's Court, New York City.

Warrant issued February 27, 1899; answered to March 1st; held in bail for trial at Special Sessions. Called for pleading

March 9th; adjourned for trial to March 24th; tried and acquitted.

Counsel: Hal Bell.

Witnesses: Chas. Sears, J. J. Coughlin and C. J. Standart.

Chemist: Jos. F. Geisler.

CASE No. 2606.

Fourth District City Magistrate's Court, New York City.

Warrant issued February 21, 1899; answered to February 24th; held in bail for trial at Special Sessions. Called for pleading March 2d; pleaded guilty; fined $25.

Counsel: Hal Bell.

Witnesses: W. J. Gentes, J. M. Esmay.

Chemist: Jos. F. Geisler.

CASE No. 2478.

Ninth District Municipal Court, New York City.

Civil penalty action; summons and complaint served February 1, 1899; action discontinued March 25th on payment of civil penalty of $25.

Counsel: W. C. Van Slyke.

Witnesses: John McGuire, A. D. Clark.

Chemist: E. G. Love.

CASE No. 2450.

Fifth District City Magistrate's Court, Brooklyn.

Warrant issued December 19, 1898; answered to December 20th; adjourned for examination to December 27th; held in bail for trial at Special Sessions. Called for pleading January 30, 1899; adjourned for trial to February 6th; pleaded guilty; fined $100.

Counsel: C. G. Macy.
Witnesses: John McGuire, Chas. Sears.
Chemist: Jos. F. Geisler.

CASE No. 1946.

Supreme Court, New York County.

Civil penalty action; summons and complaint served March 7, 1899; returnable March 27th; issues joined and case now pending.
Counsel: Robert Mazet.
Witnesses: John McGuire, J. H. Bevier.
Chemist: E. G. Love.

CASE No. 2493.

Second District City Magistrate's Court, New York City.

Warrant issued January 10, 1899; absconded; gone to Chicago.
Counsel: W. C. Van Slyke.
Witnesses: Chas. Sears, W. J. Gentes.
Chemist: Jos. F. Geisler.

CASE No. 2487.

Fourth District City Magistrate's Court, New York City.

Warrant issued January 11, 1899; answered to January 16th; adjourned for examination February 21st; to February 27th; held in bail for trial at Special Sessions. Called for pleading March 2d; adjourned for trial to March 10th; tried; convicted; fined $35.
Counsel: W. C. Van Slyke.
Witnesses: W. J. Gentes, J. H. Bevier.
Chemist: Jos. F. Geisler.

CASE No. 2491.

Fourth District City Magistrate's Court, New York City.

Warrant issued January 11, 1899; answered to January 16th; adjourned for examination to January 20th; to March 2d; held in bail for trial at Special Sessions. Called for pleading March 23d; pleaded guilty; sentence suspended.

Counsel: W. C. Van Slyke.

Witnesses: W. J. Gentes, J. H. Bevier.

Chemist: Jos. F. Geisler.

CASE No. 2449.

Second District City Magistrate's Court, Brooklyn.

Warrant issued January 16, 1899; answered to January 18th; held in bail for trial at Special Sessions. Called for pleading January 30th; adjourned for trial to February 8th; pleaded guilty; fined $25.

Counsel: Tiffany & Brush.

Witnesses: W. J. Gentes, J. M. Esmay.

Chemist: E. G. Love.

CASE No. 1387.

Seventh District City Magistrate's Court, Brooklyn.

Warrant issued January 14, 1899; answered to January 17th; held in bail for trial at Special Sessions. Called for pleading January 30th; pleaded guilty; fined $25.

Counsel: Robert Mazet.

Witnesses: W. J. Gentes, J. H. Bevier.

Chemist: E. G. Love.

CASE No. 2439.

Supreme Court, New York County.

Civil penalty action; summons and complaint served January 16, 1899; action discontinued January 23d on payment of civil penalty of $25.

Counsel: Robert Mazet.

Witnesses: J. M. Esmay, W. J. Gentes.

Chemist: Jos. F. Geisler.

CASE No. 2522.

Sixth District City Magistrate's Court, Brooklyn.

Warrant issued January 25, 1899; answered to February 7th; adjourned for examination to February 20th; held in bail for trial at Special Sessions. Called for pleading March 17th; adjourned for trial to March 31st; to April 7th; pleaded guilty; fined $25.

Counsel: Wm. J. Griffin.

Witnesses: J. M. Esmay, W. C. Patrick.

Chemist: E. G. Love.

CASE No. 2494.

First District City Magistrate's Court, Brooklyn.

Warrant issued January 23, 1899; answered to January 25th; held in bail for trial at Special Sessions. Called for pleading March 17th; adjourned for trial to March 24th; pleaded guilty; fined $25.

Counsel: Wm. J. Griffin.

Witnesses: J. M. Esmay, W. C. Patrick.

Chemist: E. G. Love.

CASE No. 2489.

Third District City Magistrate's Court, Brooklyn.

Warrant issued April 4, 1899; answered to April 6th; held in bail for trial at Special Sessions. Called for pleading April 26th; pleaded guilty; fined $25.

Counsel: Wm. J. Griffin.

Witnesses: W. C. Patrick, J. M. Esmay.

Chemist: E. G. Love.

CASE No. 2511.

Supreme Court, New York County.

Civil penalty action; summons and complaint served February 18, 1899; returnable March 14th; case awaiting trial.

Counsel: C. G. Macy.

Witnesses: W. C. Patrick, A. D. Clark.

Chemist: Jos. F. Geisler.

CASE No. 2437.

Supreme Court, New York County.

Civil penalty action; summons and complaint served February 23, 1899; action discontinued February 25th on payment of civil penalty of $50 and costs.

Counsel: Hal Bell.

Witnesses: John McGuire, J. H. Bevier.

Chemist: E. G. Love.

CASE No. 2431.

Seventh District City Magistrate's Court, New York City.

Warrant issued February 20, 1899; absconded before warrant was served.

Counsel: M. Linn Bruce.

Witnesses: W. J. Gentes, T. F. Niles.

Chemist: Jos. F. Geisler.

CASE No. 2483.

Seventh District City Magistrate's Court, New York City.

Warrant issued April 19, 1899; answered to April 20th; held in bail for trial at Special Sessions. Called for pleading May 5th; adjourned for trial to May 9th; to June 2d; tried; convicted; fined $25.

Counsel: Henry Marshall.

Witnesses: W. J. Gentes, J. H. Bevier and John McGuire.

Chemist: E. G. Love.

CASE No. 2477.

Second District City Magistrate's Court, Brooklyn.

Warrant issued November 28, 1898; answered to November 29th; held in bail for trial at Special Sessions. Called for pleading January 16, 1899; pleaded guilty; fined $25.

Counsel: C. G. Macy.

Witnesses: W. J. Gentes, W. C. Patrick.

Chemist: Jos. F. Geisler.

CASE No. 2438.

Sixth District City Magistrate's Court, Brooklyn.

Warrant issued January 25, 1899; answered to February 7th; adjourned for examination to February 20th; held in bail for trial at Special Sessions. Called for pleading March 24th; adjourned for trial to March 27th; tried; convicted; fined $25.

Counsel: Robert Mazet.

Witnesses: J. M. Esmay, W. C. Patrick.

Chemist: E. G. Love.

CASE No. 2444.

Seventh District City Magistrate's Court, Brooklyn.

Warrant issued January 14, 1899; answered to January 17th; held in bail for trial at Special Sessions. Called for pleading January 30th; pleaded guilty; fined $25.

Counsel: Albert R. L. Moore.

Witnesses: W. J. Gentes, J. H. Bevier.

Chemist: E. G. Love.

CASE No. 2445.

Second District City Magistrate's Court, Brooklyn.

Warrant issued February 21, 1899; answered to February 23d; adjourned for examination to February 28th; held in bail for trial at Special Sessions. Called for pleading March 17th; pleaded guilty; fined $25.

Counsel: Albert R. Moore.

Witnesses: W. J. Gentes, J. H. Bevier.

Chemist: E. G. Love.

CASE No. 2436.

Fifth District Municipal Court, New York City.

Civil penalty action; summons and complaint served May 23, 1899; action discontinued May 23d on payment of civil penalty of $25 and costs.

Counsel: Hal Bell.

Witnesses: John McGuire, J. H. Bevier.

Chemist: E. G. Love.

CASE No. 2550.

Seventh District City Magistrate's Court, Brooklyn.

Warrant issued April 10, 1899; answered to April 11th; held in bail for trial at Special Sessions. Called for pleading April 26th; pleaded guilty; fined $25.

Counsel: Henry Marshall.

Witnesses: W. J. Gentes, J. H. Bevier.

Chemist: E. G. Love.

CASE No. 2480.

Second District City Magistrate's Court, Brooklyn.

Warrant issued March 28, 1899; answered to March 29th; held in bail for trial at Special Sessions. Called for pleading April 12th; pleaded guilty; fined $25.

Counsel: Benjamin Oppenheimer.

Witnesses: Charles Sears, John McGuire.

Chemist: Jos. F. Geisler.

CASE No. 2547.

Supreme Court, New York County.

Civil penalty action; summons and complaint served April 1, 1899; action discontinued April 22d on payment of civil penalty of $25 and costs.

Counsel: Henry Marshall.

Witnesses: Charles Sears, W. J. Gentes.

Chemist: Jos. F. Geisler.

CASE No. 2488.

Seventh District Municipal Court, New York City.

Civil penalty action; summons and complaint served March 2, 1899; answered to March 9th; adjourned for trial to March 14th; tried; judgment for People, $50 and costs.

Counsel: Benjamin Oppenheimer.

Witnesses: Charles Sears, W. J. Gentes.

Chemist: Jos. F. Geisler.

CASE No. 2440.

Seventh District City Magistrate's Court, New York City.

Summons issued March 1, 1898; answered to March 2d; held in bail for trial at Special Sessions. Called for pleading March 17th; adjourned for trial to March 23d; pleaded guilty; fined $50.

Counsel: Benjamin Oppenheimer.

Witnesses: W. C. Patrick, J. M. Esmay.

Chemist: Jos. F. Geisler.

CASE No. 2523.

Fourth District City Magistrate's Court, New York City.

Warrant issued October 19, 1898; answered to October 21st; held in bail for trial at Special Sessions. Called for trial November 3d; adjourned to November 10th; pleaded guilty; sentence suspended.

Counsel: Robert Mazet.

Witnesses: J. M. Esmay, W. C. Patrick.

Chemist: Jos. F. Geisler.

CASE No. 2460.

Sixth District City Magistrate's Court, Brooklyn.

Warrant issued October 20, 1898; answered to October 26th; adjourned for examination to November 2d; held in bail for trial at Special Sessions. Called for pleading December 14th; adjourned for trial to December 21st; to December 28th; tried; convicted; fined $25.

Counsel: Wm. J. Griffin.

Witnesses: W. C. Patrick, J. M. Esmay and W. J. Gentes.

Chemist: E. G. Love.

CASE No. 1950.

First District City Magistrate's Court, Brooklyn.

Warrant issued October 12, 1898; answered to October 13th; adjourned for examination to October 19th; adjourned to October 25th; held in bail for trial at Special Sessions. Called for pleading December 14th; adjourned for trial to December 30th; adjourned to January 4, 1899; adjourned to January 25th; pleaded guilty; sentence suspended.

Counsel: A. J. Perry.

Witnesses: John McGuire, A. D. Clark.

Chemist: E. G. Love.

CASE No. 2371.

Fifth District City Magistrate's Court, New York City.

Warrant issued December 16, 1898; answered to December 19th; held in bail for trial at Special Sessions. Called for pleading January 5, 1899; adjourned for trial to February 17th; tried; convicted; fined $50.

Counsel: Wm. J. Griffin.

Witnesses: W. C. Patrick, John McGuire.

Chemist: Parker C. McIlhiney.

CASE No. 2546.

Second District City Magistrate's Court, New York City.

Warrant issued February 24, 1899; answered to February 25th; adjourned for examination to March 2d; to March 6th; held in bail for trial at Special Sessions. Called for pleading March 10th; pleaded guilty; fined $25.

Counsel: W. M. Tyler.

Witnesses: John McGuire, W. J. Gentes and J. H. Bevier.

Chemist: E. G. Love.

CASE No. 2549.

Seventh District City Magistrate's Court, New York City.

Warrant issued February 16, 1899; answered to February 19th; held in bail for trial at Special Sessions. Called for pleading March 17th; adjourned to April 5th; pleaded guilty; fined $50.

Counsel: Henry Marshall.

Witnesses: W. J. Gentes, Charles Sears.

Chemist: Jos. F. Geisler.

CASE No. 3378.

Supreme Court, New York County.

Civil penalty action; summons and complaint served March 8, 1899; case still pending.

Counsel: Henry Marshall.

Witnesses: Charles Sears, J. J. Coughlin and C. J. Standart.

Chemist: Jos. F. Geisler.

CASE No. 3375.

Fifth District Municipal Court, New York City.

Civil penalty action; summons and complaint served February 27, 1899; returnable March 9th; case discontinued March 21st on payment of costs by the defendant.

Counsel: Hal Bell.

Witnesses: A. D. Clark, M. T. Morgan.

Chemist: Jos. F. Geisler.

CASE No. 3389.

Fifth District City Magistrate's Court, New York City.

Warrant issued April 10, 1899; answered to April 11th; held in bail for trial at Special Sessions. Called for pleading April 14th; adjourned for trial to May 5th; tried; convicted; fined $25.

Counsel: A. F. Cosbey.

Witnesses: J. H. Bevier, W. J. Gentes.

Chemist: Jos. F. Geisler.

CASE No. 2645.

Seventh District City Magistrate's Court, New York City.

Warrant issued April 19, 1899; answered to April 20th; adjourned for examination to April 21st; held in bail for trial at Special Sessions. Called for pleading May 5th; adjourned for trial to June 2d; pleaded guilty; fined $25.

Counsel: Arthur F. Cosbey.

Witnesses: W. C. Patrick, J. M. Esmay.

Chemist: Jos. F. Geisler.

CASE No. 2636.

Supreme Court, New York County.

Civil penalty action; summons and complaint served March 28, 1899; returnable April 18th; case still pending.

Counsel: Arthur F. Cosbey.

Witnesses: W. J. Gentes, W. C. Patrick.

Chemist: E. G. Love.

CASE No. 3400.

Supreme Court, Kings County.

Civil penalty action; summons and complaint served March 19, 1899; action discontinued April 5th on payment of civil penalty of $25 and costs.

Counsel: Robert M. Johnson.

Witnesses: W. C. Patrick, W. J. Gentes.

Chemist: E. G. Love.

CASE No. 2611.

Supreme Court, Kings County.

Civil penalty action; summons and complaint served March 15, 1899; action discontinued April 17th on payment of civil penalty of $50 and costs.

Counsel: Robert M. Johnson.

Witnesses: A. D. Clark, M. T. Morgan and J. M. Esmay.

Chemist: E. G. Love.

CASE No. 3376.

Supreme Court, Kings County.

Civil penalty action; summons and complaint served March 14, 1899; action discontinued April 1st on payment of civil penalty of $25.

Counsel: Robert M. Johnson.

Witnesses: J. M. Esmay, A. D. Clark and M. T. Morgan.

Chemist: E. G. Love.

CASE No. 2498.

Seventh District City Magistrate's Court, Brooklyn.

Warrant issued February 22, 1899; answered to February 24th; adjourned for examination to March 6th; held for trial at Special Sessions. Called for pleading March 17, 1899; pleaded guilty; fined $25.

Counsel: A. J. Koehler.

Witnesses: W. C. Patrick, J. M. Esmay.

Chemist: E. G. Love.

CASE No. 1980.

Seventh District City Magistrate's Court, Brooklyn.

Warrant issued February 22, 1899; answered to February 24th; adjourned for examination to March 6th; held for trial at

Special Sessions. Called for pleading March 17th; adjourned for trial to March 27th; pleaded guilty; fined $25.

Counsel: A. J. Koehler.

Witnesses: W. C. Patrick, J. M. Esmay.

Chemist: E. G. Love.

CASE No. 3395.

Seventh District City Magistrate's Court, Brooklyn.

Warrant issued February 22, 1899; answered to February 24th; held in bail for trial at Special Sessions. Called for pleading March 17th; adjourned for trial to March 27th; adjourned to April 5th; adjourned to April 12th; pleaded guilty; fined $25.

Counsel: W. M. Tyler.

Witnesses. W. C. Patrick, W. J. Gentes and J. M. Esmay.

Chemist: Jos. F. Geisler.

CASE No. 2497.

First District City Magistrate's Court, Brooklyn.

Warrant issued March 6, 1899; answered to March 7th; held in bail for trial at Special Sessions. Called for pleading March 24th; adjourned for trial to April 3d; pleaded guilty; fined $25.

Counsel: H. H. Kellogg.

Witnesses: W. C. Patrick, J. M. Esmay.

Chemist: E. G. Love.

CASE No. 3391.

Ninth District Municipal Court, New York City.

Civil penalty action; summons and complaint served February 27, 1899; action discontinued March 7th on payment of civil penalty of $50 and costs.

Counsel: H. H. Kellogg.

Witnesses: A. D. Clark, M. T. Morgan.

Chemist: E. G. Love.

CASE No. 3399.

Second District Municipal Court, Brooklyn.

Civil penalty action; summons and complaint served February 27, 1899; answered to March 6th; adjourned for trial to March 15th; action discontinued March 15th on payment of penalty of $50 and costs.

Counsel: H. H. Kellogg.

Witnesses: W. C. Patrick, W. J. Gentes and J. M. Esmay.

Chemist: E. G. Love.

CASE No. 3379.

Second District Municipal Court, New York City.

Civil penalty action; summons and complaint, February 13, 1899; answered to April 19th; adjourned to April 26th; judgment taken by default for $100 and costs.

Counsel: James T. Williamson.

Witnesses: Charles Sears, J. J. Coughlin.

Chemist: Jos. F. Geisler.

CASE No. 2630.

Fifth District City Magistrate's Court, New York City.

Warrant issued February 23, 1899; answered to February 24th; held in bail for trial at Special Sessions. Called for pleading March 2d; pleaded guilty; fined $25.

Counsel: H. H. Kellogg.

Witnesses: A. D. Clark, M. T. Morgan.

Chemist: E. G. Love.

CASE No. 2625.

Sixth District City Magistrate's Court, Brooklyn.

Warrant issued March 8, 1899; answered to March 9th; held in bail for trial at Special Sessions. Called for pleading March 24th; tried; convicted; sentence suspended.

Counsel: John R. Farrer.

Witnesses: J. M. Esmay, W. J. Gentes.

Chemist: E. G. Love.

CASE No. 2442.

Sixth District City Magistrate's Court, Brooklyn.

Warrant issued March 8, 1899; answered to March 9th; held in bail for trial at Special Sessions. Called for pleading March 29th; adjourned for trial to April 2d; tried; convicted; fined $25.

Counsel: James T. Williamson.

Witnesses: J. M. Esmay, W. J. Gentes.

Chemist: Jos. F. Geisler.

CASE No. 2632.

Second District City Magistrate's Court, Brooklyn.

Warrant issued February 21, 1899; answered to February 23d; adjourned for examination to February 28th; adjourned to March 8th; held in bail for trial at Special Sessions. Called for pleading March 18th; adjourned for trial to April 3d; pleaded guilty; fined $25.

Counsel: A. J. Koehler.

Witnesses: W. J. Gentes, J. M. Esmay.

Chemist: E. G. Love.

CASE No. 3381.

Supreme Court, Kings County.

Civil penalty action; summons and complaint served February 18, 1899; action discontinued March 4th on payment of civil penalty of $25 and costs.

Counsel: John R. Farrer.

Witnesses: J. M. Esmay, W. J. Gentes.

Chemist: Jos. F. Geisler.

CASE No. 2383.

Second District Municipal Court, Brooklyn.

Civil penalty action; summons and complaint served May 18, 1899; returnable May 26th; defendant confessed judgment, and judgment rendered for plaintiff of $25 and costs.

Counsel: H. H. Kellogg.

Witnesses: J. M. Esmay, A. D. Clark.

Chemist: Jos. F. Geisler.

CASE No. 3380.

Supreme Court, Kings County.

Civil penalty action; summons and complaint served February 18, 1899; action discontinued March 4th on payment of civil penalty of $25 and costs.

Counsel: John R. Farrer.

Witnesses: W. J. Gentes, J. M. Esmay.

Chemist: Jos. F. Geisler.

CASE Nos. 2622, 2623.

Supreme Court, New York County.

Civil penalty action; summons and complaint served July 9, 1899; action discontinued July 10th on payment of civil penalty of $200 and costs.

Counsel: Henry Marshall.

Witnesses: W. J. Gentes, J. M. Esmay and J. H. Bevier.

Chemist: E. G. Love.

CASE No. 3363.

Tenth District Municipal Court, New York City.

Civil penalty action; summons and complaint served March 16, 1899; case discontinued March 23d on payment of civil penalty of $50 and costs.

Counsel: James T. Williamson.

Witnesses: A. D. Clark, M. T. Morgan.

Chemist: E. G. Love.

CASE No. 3370.

First District City Magistrate's Court, New York City.

Warrant issued March 8, 1899; answered to March 10th; adjourned for examination to March 17th; held in bail for trial at Special Sessions. Called for pleading April 6th; pleaded guilty; fined $25.

Counsel: S. S. Slater.

Witnesses: Charles Sears, J. J. Coughlin and C. J. Standart.

Chemist: E. G. Love.

CASE No. 3371.

First District City Magistrate's Court, New York City.

Warrant issued March 8, 1899; answered to March 10th; adjourned for examination to March 17th; held for trial at Special Sessions. Called for pleading April 6th; pleaded guilty; fined $25.

Counsel: S. S. Slater.

Witnesses: Charles Sears, J. J. Coughlin and C. J. Standart.

Chemist: E. G. Love.

CASE No. 2603.

First District Municipal Court, Brooklyn.

Civil penalty action; summons and complaint served February 27, 1899; returnable March 10th; adjourned for trial to March 30th; adjourned to April 18th; to April 25th; tried; complaint dismissed for lack of sufficient evidence.

Counsel: H. H. Kellogg.

Witnesses: Charles Sears, M. T. Morgan.

Chemist: Jos. F. Geisler.

CASE No. 3356.

Supreme Court, New York County.

Civil penalty action; summons and complaint served February 9, 1899; action discontinued February 21st on payment of civil penalty of $35 and costs.

Counsel: S. S. Slater.

Witnesses: Charles Sears, J. J. Coughlin and C. J. Standart.

Chemist: E. G. Love.

CASE No. 2604.

Sixth District City Magistrate's Court, Brooklyn.

Warrant issued January 11, 1899; answered to January 12th; held in bail for trial at Special Sessions. Called for pleading January 30th; pleaded guilty; fined $25.

Counsel: W. J. Griffin.

Witnesses: A. D. Clark, M. T. Morgan.

Chemist: E. G. Love.

CASE No. 3362.

Eighth District Municipal Court, New York City.

Civil penalty action; summons and complaint served February 25, 1899; action discontinued February 28th on payment of civil penalty of $30 and costs.

Counsel: H. H. Kellogg.

Witnesses: A. D. Clark, M. T. Morgan.

Chemist: Jos. F. Geisler.

CASE No. 3309.

Ninth District Municipal Court, New York City.

Civil penalty action; summons and complaint served May 4, 1899; action discontinued May 18th on payment of civil penalty of $25 and costs.

Counsel: S. S. Slater.

Witnesses: J. M. Esmay, W. J. Gentes.

Chemist: E. G. Love.

CASE No. 2482.

Supreme Court, New York County.

Civil penalty action; summons and complaint served March 9, 1899; action discontinued April 25th on payment of civil penalty of $50 and costs.

Counsel: Henry Marshall.

Witnesses: J. M. Esmay, W. J. Gentes.

Chemist: E. G. Love.

CASE No. 3301.

Third District City Magistrate's Court, New York City.

Warrant issued March 22, 1899; answered to April 6th; held in bail for trial at Special Sessions. Called for pleading April 13th; adjourned for trial to May 5th; pleaded guilty; fined $25.

Counsel: Arthur F. Cosbey.

Witnesses: W. C. Patrick, W. J. Gentes.

Chemist: E. G. Love.

CASE No. 2635.

Supreme Court, Kings County.

Civil penalty action; summons and complaint served March 14, 1899; returnable April 3d; adjourned for trial to April 6th; judgment taken by default for $100 and costs.

Counsel: Robert M. Johnson.

Witnesses: W. C. Patrick, W. J. Gentes.

Chemist: E. G. Love.

CASE No. 2643.

First District City Magistrate's Court, Brooklyn.

Warrant issued March 29, 1899; answered to March 30th; held in bail for trial at Special Sessions. Called for pleading April 5th; pleaded guilty; fined $25.

Counsel: Arthur F. Cosbey.

Witnesses: W. C. Patrick, J. M. Esmay.

Chemist: E. G. Love.

CASE No. 3262.

Fourth District City Magistrate's Court, New York City.

Warrant issued May 30, 1899; answered to June 1st; held in bail for trial at Special Sessions. Called for pleading June 5th; adjourned to June 6th; pleaded guilty; sentenced to four months in the Penitentiary.

Counsel: S. S. Slater.

Witnesses: J. M. Esmay, W. J. Gentes.

Chemist: Jos. F. Geisler.

CASE No. 2650.

Supreme Court, Kings County.

Civil penalty action; summons and complaint served March 14, 1899; action discontinued April 2d on payment of civil penalty of $25 and costs.

Counsel: Robert M. Johnson.

Witnesses: J. H. Bevier, W. J. Gentes.

Chemist: E. G. Love.

CASE No. 3254.

Supreme Court, Kings County.

Civil penalty action; summons and complaint served March 14, 1899; action discontinued April 2d on payment of civil penalty of $25 and costs.

Counsel: Robert M. Johnson.

Witnesses: W. J. Gentes, J. H. Bevier.

Chemist: E. G. Love.

CASE No. 3263.

Second District City Magistrate's Court, Brooklyn.

Warrant issued May 8, 1899; answered to May 11th; held in bail for trial at Special Sessions. Called for pleading May 24th; adjourned for trial to May 31st; pleaded guilty; sentence suspended.

Counsel: Fred A. Ware.

Witnesses: J. M. Esmay, W. J. Gentes.

Chemist: E. G. Love.

CASE No. 3256.

Supreme Court, New York County.

Civil penalty action; summons and complaint served June 17, 1899; action discontinued September 19th on payment of civil penalty of $25 and costs.

Counsel: Robert Mazet.

Witnesses: W. J. Gentes, A. D. Clark.

Chemist: Jos. F. Geisler.

CASE No. 2646.

Ninth District Municipal Court, New York City.

Civil penalty action; summons and complaint served May 3, 1899; action discontinued May 18th on payment of civil penalty of $25 and costs.

Counsel: S. S. Slater.

Witnesses: W. J. Gentes, J. M. Esmay.

Chemist: E. G. Love.

CASE No. 3261.

Fifth District City Magistrate's Court, New York City.

Warrant issued July 7, 1899; answered to August 7th; held in bail for trial at Special Sessions.

Counsel: Robert Mazet.

Witnesses: W. J. Gentes, J. M. Esmay.

Chemist: Jos. F. Geisler.

CASE No. 3303.

Second District Municipal Court, Brooklyn.

Civil penalty action; summons and complaint served May 8, 1899; returnable May 19th; adjourned for trial to May 26th; inquest taken and judgment rendered for the People for $50 and costs.

Counsel: Fred A. Ware.

Witnesses: W. J. Gentes, J. M. Esmay.

Chemist: E. G. Love.

CASE No. 3257.

Supreme Court, New York County.

Civil penalty action; summons and complaint served May 2, 1899; action discontinued June 17th on payment of costs by defendant.

Counsel: Robert Mazet.

Witnesses: W. C. Patrick, J. M. Esmay.

Chemist: Jos. F. Geisler.

CASE No. 3365.

Supreme Court, New York County.

Civil penalty action; summons and complaint served May 20, 1899; action discontinued June 24th on payment of costs by defendant.

Counsel: Fred A. Ware.

Witnesses: A. D. Clark, M. T. Morgan.

Chemist: E. G. Love.

CASE No. 2621.

Fourth District City Magistrate's Court, Brooklyn.

Warrant issued January 19, 1899; answered to January 20th; adjourned for examination to January 27th; held in bail for trial at Special Sessions. Called for pleading March 17th; adjourned for trial to March 27th; tried; convicted; fined $100.

Counsel: C. G. Macy.

Witnesses: W. J. Gentes, J. M. Esmay and Max Friedman.

Chemist: Jos. F. Geisler.

CASE No. 2642.

Supreme Court, Kings County.

Civil penalty action; summons and complaint served April 1, 1899; action discontinued April 5th on payment of civil penalty of $25.

Counsel: Robert M. Johnson.

Witnesses: W. C. Patrick, J. M. Esmay.

Chemist: E. G. Love.

CASE No. 3306.

Second District City Magistrate's Court, New York City.

Warrant issued June 22, 1899; answered to June 23d; held in bail for trial at Special Sessions. Called for pleading July 2d; pleaded guilty; fined $50.

Counsel: Fred A. Ware.

Witnesses: W. C. Patrick, A. D. Clark.

Chemist: E. G. Love.

CASE No. 3311.

Ninth District Municipal Court, New York City.

Civil penalty action; summons and complaint served May 5, 1899; action discontinued May 18th on payment of civil penalty of $25 and costs.

Counsel: S. S. Slater.

Witnesses: J. M. Esmay, W. J. Gentes.

Chemist: E. G. Love.

CASE No. 3313.

First District Municipal Court, Brooklyn.

Civil penalty action; summons and complaint served July 27, 1899; returnable August 4th; adjourned for trial August 22d; adjourned to September 12th; to October 6th.

Counsel: W. S. Brewster.

Witnesses: J. M. Esmay, W. J. Gentes.

Chemist: E. G. Love.

CASE No. 3267.

Sixth District City Magistrate's Court, Brooklyn.

Warrant issued July 13, 1899; answered to July 17th; adjourned for examination to July 25th; adjourned to August 1st; to August 15th; held in bail for trial at Special Sessions.

Counsel: W. S. Brewster.

Witnesses: J. M. Esmay, W. J. Gentes and W. C. Patrick.

Chemist: Jos. F. Geisler.

CASE No. 3260.

Seventh District City Magistrate's Court, Brooklyn.

Warrant issued July 6, 1899; answered to July 14th; adjourned for examination to July 21st; held in bail for trial at Special Sessions. Called for trial August 30th; pleaded guilty; fined $25.

Counsel: W. S. Brewster.

Witnesses: W. C. Patrick, J. M. Esmay.

Chemist: E. G. Love.

CASE No. 3266.

Sixth District City Magistrate's Court, Brooklyn.

Warrant issued July 5, 1899; answered to July 7th; held in bail for trial at Special Sessions. Called for pleading August 9th; pleaded guilty; fined $100.

Counsel: W. S. Brewster.

Witnesses: W. C. Patrick, W. J. Gentes.

Chemist: E. G. Love.

CASE No. 3264.

Seventh District City Magistrate's Court, Brooklyn.

Warrant issued July 6, 1899; answered to July 8th; adjourned for examination July 13th; held in bail for trial at Special Sessions. Called for pleading July 26th; adjourned for trial to August 2d; adjourned to August 16th; to August 30th; to September 13th; to October 9th.

Counsel: James T. Williamson.

Witnesses: W. C. Patrick, J. M. Esmay.

Chemist: E. G. Love.

CASE No. 2428.

Ninth District Municipal Court, New York City.

Civil penalty action; summons and complaint served; action discontinued June 5, 1899, on payment of civil penalty of $50 and costs.

Counsel: S. S. Slater.

Witnesses: Charles Sears, W. J. Gentes.

Chemist: E. G. Love.

CASE No. 3319.

First District City Magistrate's Court, New York City.

Warrant issued June 2, 1899; died before warrant was served.

Counsel: S. S. Slater.

Witnesses: A. D. Clark, John McGuire.

Chemist: E. G. Love.

CASE No. 3312.

Fourth District City Magistrate's Court, Brooklyn.

Warrant issued May 5, 1899; answered to May 16th; adjourned for examination to May 23d; held in bail for trial at Special Sessions. Called for pleading May 29th; pleaded guilty; fined $25.

Counsel: James T. Williamson.

Witnesses: W. J. Gentes, J. M. Esmay and W. C. Patrick.

Chemist: Jos. F. Geisler.

CASE No. 3317.

Fifth District City Magistrate's Court, New York City.

Warrant issued June 2, 1899; answered to June 3d; held in bail for trial at Special Sessions. Called for pleading July 7th; pleaded guilty; fined $25.

Counsel: Geo. P. Nock.

Witnesses: J. H. Bevier, John McGuire.

Chemist: Jos. F. Geisler.

CASE No. 3277.

Second District City Magistrate's Court, New York City.

Warrant issued May 7, 1899; answered to May 23d; held in bail for trial at Special Sessions. Called for pleading June 2d; adjourned for trial to July 7th; pleaded guilty; fined $25.

Counsel: S. S. Slater.

Witnesses: Chas. Sears, John McGuire.

Chemist: Jos. F. Geisler.

CASE No. 3271.

First District Municipal Court, Brooklyn.

Civil penalty action; summons and complaint served June 15, 1899; action discontinued June 22d on payment of civil penalty of $50 and costs.

Counsel: James T. Williamson.

Witnesses: W. J. Gentes, J. M. Esmay, W. C. Patrick.

Chemist: E. G. Love.

CASE No. 3280.

First District Municipal Court, New York City.

Civil penalty action; summons and complaint served June 15, 1899; action discontinued June 26th on payment of civil penalty of $50.

Counsel: James T. Williamson.
Witnesses: W. J. Gentes, J. H. Bevier.
Chemist: Jos. F. Geisler.

CASE No. 3268.

Eighth District City Magistrate's Court, Brooklyn.

Warrant issued July 6, 1899; answered to July 10th; adjourned for examination to September 8th; to September 14th; to November 10th.

Counsel: W. H. Van Benschoten.
Witnesses: J. M. Esmay, W. J. Gentes.
Chemist: E. G. Love.

CASE No. 3282.

Second District City Magistrate's Court, New York City.

Warrant issued June 22, 1899; answered to June 23d; held in bail for trial at Special Sessions. Called for pleading July 7th; pleaded guilty; fined $25.

Counsel: W. H. Van Benschoten.
Witnesses: Chas. Sears, J. M. Esmay.
Chemist: Jos. F. Geisler.

CASE No. 3320.

First District Municipal Court, Brooklyn.

Civil penalty action; summons and complaint served May 27, 1899; action discontinued June 26th on payment of civil penalty of $50.

Counsel: James T. Williamson.
Witnesses: W. C. Patrick, J. M. Esmay.
Chemist: E. G. Love.

CASE No. 3322.

Supreme Court, New York City.

Civil penalty action; summons and complaint served August, 1899; action discontinued September 2, 1899, on payment of $25 and costs.

Counsel: Henry Marshall.

Witnesses: W. C. Patrick, W. J. Gentes.

Chemist: E. G. Love.

CASE No. 3279.

First District City Magistrate's Court, New York City.

Warrant issued July 26, 1899; answered to July 27th; held in bail for trial at Special Sessions.

Counsel: Henry Marshall.

Witnesses: John McGuire, A. D. Clark.

Chemist: E. G. Love.

CASE No. 3323.

Second District City Magistrate's Court, Brooklyn.

Warrant issued May 27, 1899; answered to June 11th; adjourned for examination to June 15th; held in bail for trial at Special Sessions. Called for pleading June 21st; adjourned for trial to June 28th; adjourned for trial to July 12th; to July 19th: pleaded guilty; sentence suspended.

Counsel: Geo. Tiffany.

Witnesses: W. J. Gentes, W. C. Patrick.

Chemist: E. G. Love.

CASE No. 3308.

Seventh District City Magistrate's Court, New York City.

Warrant issued September 5, 1899; answered to September 6th; held in bail for trial at Special Sessions.

Counsel: John R. Farrer.

Witnesses: J. H. Bevier, A. D. Clark.

Chemist: E. G. Love.

CASE No. 3325.

First District City Magistrate's Court, Long Island City.

Warrant issued August 1, 1899; answered to August 2d; held in bail for trial at Special Sessions. Called for pleading August 8th; adjourned for trial to August 29th; adjourned to September 12th; adjourned to October 2d.

Counsel: John R. Farrer.

Witnesses: A. D. Clark, J. M. Esmay.

Chemist: E. G. Love.

CASE No. 3291.

Fifth District City Magistrate's Court, Brooklyn.

Warrant issued August 17, 1899; answered to August 18th; adjourned for examination to August 24th; held in bail for trial at Special Sessions.

Counsel: A. J. Koehler.

Witnesses: W. C. Patrick, J. M. Esmay and W. J. Gentes.

Chemist: E. G. Love.

CASE No. 2427.

First District City Magistrate's Court, Long Island City.

Warrant issued July 28, 1899; answered to July 29th; adjourned for examination to August 2d; held in bail for trial at Special Sessions. Called for pleading August 29th; adjourned for trial to September 12th; adjourned to October 3d.

Counsel: John R. Farrer.

Witnesses: J. M. Esmay, A. D. Clark.

Chemist: E. G. Love.

CASE No. 3332.

Seventh District City Magistrate's Court, New York City.

Warrant issued July 26, 1899; answered to July 27th; held in bail for trial at Special Sessions.

Counsel: Benjamin Estes.

Witnesses: W. C. Patrick, J. M. Esmay and W. J. Gentes.

Chemist: Jos. F. Geisler.

CASE No. 2639.

First District City Magistrate's Court, Long Island City.

Warrant issued July 28, 1899; answered to July 29th; adjourned for examination to August 2d; held in bail for trial at Special Sessions. Called for pleading August 29th; adjourned for trial to September 21st; adjourned to October 3d.

Counsel: A. J. Koehler.

Witnesses: W. J. Gentes, J. M. Esmay and A. D. Clark.

Chemist: Jos. F. Geisler.

CASE No. 3292.

Seventh District City Magistrate's Court, New York City.

Warrant issued July 26, 1899; answered to July 27th; held in bail for trial at Special Sessions.

Counsel: A. J. Koehler.

Witnesses: W. J. Gentes, J. M. Esmay.

Chemist: Jos. F. Geisler.

CASE No. 3334.

Seventh District City Magistrate's Court, New York City.

Warrant issued July 28, 1899; answered to August 8th; held in bail for trial at Special Sessions. Called for pleading August 30th; adjourned for trial to September 17th; adjourned to October 9th.

Counsel: A. J. Koehler.

Witnesses: W. C. Patrick, J. M. Esmay and W. J. Gentes.

Chemist: E. G. Love.

CASE No. 3336.

Second District City Magistrate's Court, New York City.

Warrant issued July 28, 1899; answered to July 31st; adjourned for examination to August 2d; held in bail for trial at Special Sessions.

Counsel: John R. Farrer.

Witnesses: J. M. Esmay, W. J. Gentes.

Chemist: Jos. F. Geisler.

CASE No. 3299.

Fifth District City Magistrate's Court, New York City.

Warrant issued September 5, 1899; answered to September 6th; held in bail for trial at Special Sessions.

Counsel: Geo. Fielder.

Witnesses: W. J. Gentes, J. M. Esmay.

Chemist: E. G. Love.

CASE No. 3295.

First District City Magistrate's Court, Staten Island.

Warrant issued September 15, 1899; answered to September 22d; held in bail for trial at Special Sessions. Called for pleading September 28th; adjourned for trial to October 5th.

Counsel: E. F. Collier.

Witnesses: W. J. Gentes, John McGuire.

Chemist: E. G. Love.

CASE No. 3337.

Fourth District City Magistrate's Court, New York City.

Warrant issued September 6, 1899; answered to September 7th; held in bail for trial at Special Sessions.

Counsel: Geo. Fielder.

Witnesses: Chas. Sears, W. J. Gentes.

Chemist: E. G. Love.

CASE No. 3298.

Fourth District City Magistrate's Court, New York City.

Warrant issued August 30, 1899; answered to September 1st; held in bail for trial at Special Sessions.

Counsel: E. L. Collier.

Witnesses: W. C. Patrick, J. M. Esmay and W. J. Gentes.

Chemist: E. G. Love.

CASE No. 3297.

Fifth District City Magistrate's Court, Brooklyn.

Warrant issued August 30, 1899; answered to August 31st; adjourned for examination to September 31st; held in bail for trial at Special Sessions.

Counsel: E. L. Collier.

Witnesses: A. D. Clark, Chas. Sears.

Chemist: Jos. F. Geisler.

CASE No. 3335.

Second District City Magistrate's Court, New York City.

Warrant issued September 11, 1899; answered to September 31st; held in bail for trial at Special Sessions.

Counsel: Geo. Fielder.

Witnesses: A. D. Clark, J. M. Esmay.

Chemist: Jos. F. Geisler.

CASE No. 3296.

First District City Magistrate's Court, New York City.

Warrant issued August 30, 1899; answered to August 31st; adjourned for examination September 1st; held in bail for trial at Special Sessions.

Counsel: E. L. Collier.

Witnesses: J. M. Esmay, W. J. Gentes.

Chemist: E. G. Love.

CASE No. 2354.

Eighth District City Magistrate's Court, New York City.

Warrant issued September 23, 1899.

CASE No. 3345.

Second District City Magistrate's Court, New York City.

Warrant issued September 11, 1899; answered to September 13th; held in bail for trial at Special Sessions.

Counsel: W. H. Van Benschoten.

Witnesses: W. J. Gentes, Chas. Sears.

Chemist: E. G. Love.

CASE No. 2637.

Third District City Magistrate's Court, Far Rockaway.

Warrant issued September 16, 1899; answered to September 18th; adjourned for examination September 28th; held in bail for trial at Special Sessions.

Counsel: S. S. Slater.

Witnesses: John McGuire, A. D. Clark.

Chemist: E. G. Love.

CASE No. 2446.

Supreme Court, Kings County.

Civil penalty action; summons and complaint served January 20, 1899; action discontinued January 20th on payment of civil penalty of $25 and costs.

Counsel: Albert R. Moore.

Witnesses: W. J. Gentes, J. H. Bevier.

Chemist: E. G. Love.

CASE No. 2354.

Eighth District City Magistrate's Court, Coney Island.

Warrant issued September 23, 1899.

Counsel: A. Mathews.

Witnesses: John McGuire, A. D. Clark.

Chemist: Jos. F. Geisler.

CASE No. 2476.

First District Municipal Court, New York City.

Civil penalty action; summons and complaint served January 24, 1899; returnable January 12th; issue joined January 18th; trial adjourned to March 6th; to May 11th; judgment entered for $25.

Counsel: C. G. Macy.

Witnesses: W. J. Gentes, J. M. Esmay.

Chemist: Jos. F. Geisler.

CASES Nos. 2420–2448.

Supreme Court, Special Term, Kings County.

Civil penalty action and injunction; summons, complaint and injunction order served December 17, 1898; returnable December 21st and permanent injunction granted. Civil penalty action

discontinued January 12, 1899, on payment of penalty of $100 and costs. The injunction to stand.

Counsel: Albert R. Moore.

Witnesses: W. J. Gentes, J. H. Bevier, A. D. Clark and John McGuire.

Chemists: E. G. Love and Jos. F. Geisler.

CASE No. 2456.

Supreme Court, Special Term, Kings County.

Civil penalty action and injunction; summons, complaint and injunction order served February 2, 1899; returnable February 4th and permanent injunction order granted April 28th. Order granted to show cause upon proceedings to punish for contempt on September 13, 1899, and original order served on defendant September 14th. Case still pending.

Counsel: Albert R. Moore.

Witnesses: J. M. Esmay, A. D. Clark.

Chemist: E. G. Love.

The status of the following seven prosecutions for violations of the Agricultural Law relating to oleomargarine was fully reported in the last Annual Report; the final disposition of five and the present status of the others is given in the annexed table:

Oleomargarine.

Case No.	COURT.	Place.	Called for Trial	Remarks.
1871....	General Sessions.....	Brooklyn.. ..	December 13, 1898	Awaiting trial.
2507 ...	Supreme Court.....	Kings county..	March 18, 1899	Action discontinued on payment of civil penalty of $50 and costs.
2511....	Grand Jury.....	New York co..	November 1, 1898	Not indicted.
2364...	Supreme Court.....	Kings county..	December 15, 1898	Action discontinued on payment of civil penalty of $75 and costs.
2406....	Special Sessions.....	New York city.	November 10, 1898	Pleaded guilty; sentence suspended.
2414....	Special Sessions.....	New York city.	November 3, 1898	Pleaded guilty; fined $25.
2527....	Supreme Court.....	New York co..	....	On calendar awaiting trial.

Total receipts over all roads for the year ending Sept. 30, 1899.

MONTH.	Cans crude milk.	Cans cream.	Cans unsweetened condensed milk.	Average market price to producer per quart.	Platform price per can, freight paid
1898.					
October	749,765	19,818	6,150	$2 50	$1 30
November	718,629	16,810	6,998	2 63	1 40
December	707,829	16,698	5,797	3 00	1 44
1899.					
January	710,850	16,514	5,466	2 75	1 34
February	638,799	15,260	6,141	2 50	1 28
March	744,585	18,347	7,678	2 50	1 26
April	746,327	24,530	7,032	2 25	1 20
May	823,396	36,124	9,733	2 12	1 16
June	862,143	46,002	9,826	2 00	1 15
July	848,420	41,223	8,049	2 17	1 29
August	784,585	36,600	7,919	2 25	1 30
September	741,341	30,444	2,465	2 50	1 39
Total	9,067,769	318,370	83,259	.....	.....

Total cans crude milk	9,076,769
Total cans cream	318,370
Total cans unsweetened condensed milk	83,259
Estimated value (freight included)	$15,402,317

Daily average cans of crude milk	24,845
Daily average cans cream	872
Daily average cans unsweetened condensed milk	228

The above amount of milk does not include milk sold to condensers, most of which reaches the New York market in small cans which is estimated to equal 2,120,000 cans.

Estimated value	$2,968,000
Estimated value as shown above	15,402,317
Total	$18,370,317

The above receipts of milk, cream and condensed milk is equal to 13,121,655 cans of crude milk, of 40 quarts each, or 524,866,200 quarts, representing a daily receipt of 1,437,989 quarts of crude milk.

Receipts of crude milk, unsweetened condensed milk and cream in New York by the railroads and other sources for the month of January, 1899.

RAILROADS.	Cans crude milk.	Cans cream.	Cans condensed milk.	Daily average cans milk, cream and condensed milk.	Per cent. over each route.
Erie	134,807	4,102	2,312	4,556	19 1
New York Central and Harlem	77,548	1,434	957	2,579	10.9
Ontario	117,756	4,112	.....	3,931	16.6
Susquehanna	54,953	2,166	.....	1,842	08.0
Northern	12,400	.....	.....	400	01.8
West Shore	63,156	1,528	2,197	2,157	09 0
New Haven	38,268	77	.....	1,237	05.2
Delaware, Lackawanna and Western	159,793	2,587	.....	5,238	22.2
Long Island	77	.....	.....	3	.....
New Jersey Central	6,150	50	.....	200	00.8
* Homer Ramsdell Transportation Co.	.....	.....	.....	.....	.....
Lehigh Valley	27,342	458	.....	897	03.8
Other sources	18,850	.....	.....	600	02 6
Total cans	710 850	16,514	5,466		

* River closed, no boats running.

Total cans crude milk	710,850
Total cans cream	16,514
Total cans unsweetened condensed milk	5,466
Total cans, all kinds	732,830
Daily average crude milk, cans	22,931
Daily average cream, cans	533
Daily average unsweetened condensed milk, cans	176
Average price of crude milke to producer, per quart	$0.0275
Average platform price per can, freight paid	1.34

Receipts of crude milk, unsweetened condensed milk and cream in New York by the railroads and other sources for the month of February, 1899.

RAILROADS.	Cans crude milk.	Cans cream.	Cans condensed milk.	Daily average cans milk, cream and condensed milk.	Per cent. over each route.
Erie	121,994	2,274	2,245	4,554	19.3
New York Central and Harlem	65,000	1,000	1,004	2,393	10.1
Ontario	103,884	4,428	.....	3,868	16.4
Susquehanna	49,111	1,422	1,035	1,843	07.8
Northern	11,200	.....	.....	400	01.7
West Shore	57,094	1,463	1,778	2,155	09 1
New Haven	35,256	68	.....	1,262	05.4
Delaware, Lackawanna and Western	145,804	2,746	.....	5,305	22.5
Long Island	53	.....	.....	2	.....
New Jersey Central	7,000	196	.....	257	01.1
*Homer Ramsdell Transportati n Co	.....	.....	.....	.....	.....
Lehigh Valley	25,573	663	79	910	04.0
Other sources	16,800	.....	.....	600	02.6
Total cans	638,799	15,260	6,141		

* River closed; no boats running.

Total cans crude milk	638,799
Total cans cream	15,260
Total cans unsweetened condensed milk	6,141
Total cans all kinds	660,200
Average daily crude milk, cans	22,814
Daily average cream, cans	545
Daily average unsweetened condensed milk, cans	219
Average price of crude milk to producer, per quart	$0.025
Average platform price per can, freight paid	1.28

Receipts of crude milk, unsweetened condensed milk and cream in New York by the railroads and other sources for the month of March, 1899.

RAILROADS.	Cans crude milk.	Cans cream.	Cans condensed milk.	Daily average cans milk, cream and condensed mik.	Per cent. over each route.
Erie	133,801	4,000	2,674	4,531	18 0
New York Central and Harlem	82,925	893	1,3-8	2,718	11.0
Ontario	117,388	5,477	.....	3,963	16.0
Susquehanna	56,958	1,267	1,8 7	1,939	07 8
Northern	15,679	.....	.....	503	02.0
West Shore	68,283	1,875	1,669	2,252	09.5
New Haven	38,0 0	70	.....	1,228	05.0
Delaware, Lackawanna and Western	164,329	3,3 7	....	5,410	21.7
Long Island	96	.....	.. ..	3	.....
New Jersey Central	7,700	143	....	253	01.0
Hom r Ramsdell Tr nsportation Co	11,899	4 7	.....	400	01.5
Lehigh Valley	3 ,927	838	70	1,027	04 1
Other sources	18,600	.....	.....	600	02.4
Total cans	744,585	18,347	7,678	.....	.....

Total cans crude milk	744,585
Total cans cream	18,347
Total cans unsweetened condensed milk	7,678
Total cans all kinds	770,610
Daily average crude milk, cans	24,619
Daily average cream, c ns	592
Daily average unsweetened condensed milk, cans	248
Average price of crude milk to producer, per quart	$0.025
Average platform price per can, freight paid	1.26

Receipts of crude milk, unsweetened condensed milk and cream in New York by the railroads and other sources for the month of April, 1899.

RAILROADS.	Cans crude milk.	Cans cream.	Cans condensed milk.	Daily average cans milk, cream and condensed milk.	Per cent. over each route.
Erie	127,008	4,852	2,752	4,488	17.3
New York Central and Harlem	68,812	713	1,509	2,368	09.1
Ontario	122,745	6,887	.....	4,321	16.6
Susquehanna	56,541	2,217	1,520	2,009	07.7
Northern	14 231	.....	.....	474	01.8
West Shore	68,194	3,059	1,178	2,414	09.3
New Haven	34,916	109	.....	1.167	04 5
Delaware, Lackawanna and Western	167,725	4,494	.....	5,741	22.1
Long Island	90	.....	.....	3	.....
New Jersey Central	5,894	212	.....	203	00 8
Homer Ramsdell Transportation Co	25 935	712	.....	888	03.5
Lehigh Valley	36,236	1,245	73	1,252	05.0
Other sources	18,000	.....	.....	600	02.3
Total cans	746,327	24,530	7,032	.....	.....

Total cans crude milk	746,327
Total cans cream	24,530
Total cans unsweetened condensed milk	7,032
Total cans all kinds	777,889
Daily ave age crude milk cans	24 877
Daily average cream, cans	818
Daily average unsweetened condensed milk, cans	234
Average price crude milk to producer, per quart	$0 0225
Average platform price per can, freight paid	1.20

Receipts of crude milk, unsweetened condensed milk and cream in New York by the railroads and other sources for the month of May, 1899.

RAILROADS.	Cans crude milk.	Cans cream.	Cans condensed milk.	Daily average cans milk, cream and condensed milk.	Per cent. over each route.
Erie	133,889	7,267	3,952	4,681	16.7
New York Central and Harlem	69,392	857	1,237	2,306	08.2
Ontario	146,856	10,101	.....	5,063	18.0
Susquehanna	60,773	1,783	3,138	2,119	07.6
Northern	15,047	.....	.....	485	01.7
West Shore	74,738	5,014	1,095	2,608	09.3
New Haven	39,378	109	.....	1,274	04.6
Delaware, Lackawanna and Western	182,443	7,110	.....	6,114	21.8
Long Island	73	.....	.....	2	.....
New Jersey Central	7,595	296	.....	255	00.9
Homer Ramsdell Transportation Co	29,386	701	.....	971	03.4
Lehigh Valley	45,226	2,886	311	1,562	05.6
Other sources	18,600	.....	.....	600	02.2
Total cans	823,396	36,124	9,733		

Total cans crude milk	823,396
Total cans cream	36,124
Total cans unsweetened condensed milk	9,733
Total cans all kinds	869,253
Daily average crude milk, cans	26,561
Daily average cream, cans	1,165
Daily average unsweetened condensed milk, cans	314
Average price crude milk to producer, per quart	$0.0212
Average platform price per can, freight paid	1.16

Receipts of crude milk, unsweetened condensed milk and cream in New York by the railroads and other sources for the month of June, 1899.

RAILROADS.	Cans crude milk.	Cans cream.	Cans condensed milk.	Daily average cans milk, cream and condensed milk.	Per cent over each route.
Erie	147,216	8,858	4,025	5,337	17.4
New York and Harlem	55,963	625	1,644	1,941	05 3
Ontario	138,498	13,160	.....	5 055	16 5
Susquehanna	64,363	1,728	2,744	2,294	07.5
Northern	14,887	.....	.....	496	01.6
West Shore	49,236	5,495	862	1,853	06 1
New Haven	39,782	92	.....	1,329	04 3
Delaware, Lackawanna and Western	200,409	8,830	.....	6,94 1	22.8
New York Central and West Shore (long haul)	48,064	2,500	.....	1,685	05 5
New Jersey Central	7,744	289	.....	268	00 9
Homer Ramsdell Transportation Co	30,098	627	.....	1,024	03.4
Lehigh Valley	47,883	3,798	551	1,741	05.7
Other sources.	18,000	.....	.....	600	02.0
Total cans	862,143	46,002	9,826		

Total cans crude milk	862.143
Total cans cream	46,002
Total cans unsweetened condensed milk	9,826
Total cans, all kinds	917,971
Daily average crude milk, cans	28,738
Daily average cream, cans	1,533
Daily average unsweetened condensed milk, cans	327
Average price of crude milk to producer, per quart	$0.02
Average platform price per can, freight paid	1.15

Receipts of crude milk, unsweetened condensed milk and cream in New York by the railroads and other sources for the month of July, 1899.

RAILROADS.	Cans crude milk.	Cans cream.	Cans condensed milk.	Daily average cans milk, cream and condensed milk.	Per cent. over each route.
Erie	137,161	7,653	3,207	4,775	16.5
New York and Harlem	36,420	406	1,277	1,929	04.2
Ontario	177,1 3	1?,723	.....	6,124	21 1
Susquehanna	6 ,351	1,390	2,021	2,089	07 2
Northern	13,690	.....	.....	442	01.5
West Shore	4?,165	5,343	1,137	1,537	05.3
New Haven	31,8?4	125	....	1,129	04.0
Delaware, Lackawanna and Western	18?,300	7,000	.....	6,300	21.7
New York Central and West shore (long haul)	54,755	2,819	....	1,857	06.4
New Jersey Central	7,000	130	.....	230	00.8
Homer Ramsdell Transportation Co	28,897	483	.....	948	03.3
Lehigh Valley	49,081	3,151	407	1,669	06 0
Other sources	18,600	.....	....	600	02.0
Total cans	848,420	41,223	8,049	.....	....

Total cans crude milk	848,420
Total cans cream	41,223
Total cans unsweetened condensed milk	8,049
Total cans all kinds	897,692
Daily average crude milk, cans	27,368
Daily average cream, cans	1,330
Daily average unsweetened condensed milk, cans	260
Average price crude milk to producer, per quart	$0 0217
Average platform price per can, freight paid	1.29

Receipts of crude milk, unsweetened condensed milk and cream in New York by the railroads and other sources for the month of August, 1899.

RAILROADS.	Cans crude milk.	Cans cream.	Cans condensed milk.	Daily average cans milk, cream and condensed milk.	Per cent. over each route.
Erie	128,636	6,658	3,532	4,478	16.7
New York and Harlem	32,921	414	1,590	1,127	04 2
Ontario	135,591	10,749	.....	4,721	17.6
Susquehanna	61,319	1,390	1,721	2,078	07.8
Northern	13,240	.....	.....	427	01.6
West Shore	59,024	4,388	1,076	1,435	05.5
New Haven	33,259	102	.....	1,073	04.0
Delaware, Lackawanna and Western	184,852	6,172	.....	6,162	23.0
New York Central and West Shore (long haul)	51,474	3,057	.....	1,855	07.0
New Jersey Central	7,043	157	.....	232	00.9
Homer Ramsdell Transportation Co	28,801	553	.....	947	03.5
Lehigh Valley	47,425	2,960	.....	1,625	06.0
Other sources	18,000	.....	.....	600	06.2
Total cans	784,585	36,600	7,919	.....	.....

Total cans crude milk	784,585
Total cans cream	36,600
Total cans unsweetened condensed milk	7,919
Total cans all kinds	829,104
Daily average crude milk, cans	25,309
Daily average cream, cans	1,181
Daily average unsweetened condensed milk, cans	255
Average price crude milk to producer, per quart	$0.0225
Average platform price per can, freight paid	1.30

Receipts of crude milk, unsweetened condensed milk and cream in New York by the railroads and other sources for the month of September, 1899.

RAILROADS.	Cans crude milk.	Cans cream.	Cans condensed milk.	Daily average cans milk, cream and condensed milk.	Per cent. over each route.
Erie	120,800	8,494		4,310	16.7
New York and Harlem	34,347	435	1,750	1.218	04.7
Ontario	136,440	7,727		4,806	18.6
Susquehanna	57,179	2,624		1,993	07.7
Northern	12,029			401	01.6
West Shore	39,929	2,908	715	1,452	05.6
New Haven	29,488	104		986	03.8
Delaware, Lackawanna and Western	173,000	4,000		5,900	22.9
New York Central and West Shore (long haul)	47.454	1,956		1,647	06.4
New Jersey Central	6.000	120		224	00.9
Homer Ramsdell Transportation Co	35,910	488		880	03.4
Lehigh Valley	40,765	1,588		1,412	05.5
Other sources	18,000			600	02 2
Total cans	741,341	30,444			

Total cans crude milk	741,341
Total cans cream	30,444
Total cans unsweetened condensed milk	2,465
Total cans all kinds	774,250
Daily average crude milk, cans	24,711
Daily average cream, cans	1,015
Daily average unsweetened condensed milk, cans	82
Average price crude milk to producer, per quart	$0.025
Average platform price per can, freight paid	1.39

Receipts of crude milk, unsweetened condensed milk and cream in New York by the railroads and other sources for the month of October, 1899.

RAILROADS.	Cans crude milk.	Cans cream.	Cans condensed milk.	Daily average cans milk, cream and condensed milk.	Per cent. over each route.
Erie	130,376	3,731	2,675	4,412	17.6
New York Central and Harlem	56,979	631	2,182	1,929	07.7
Ontario	120,033	5,272	.....	4,042	16.2
Susquehanna	57,742	1,929	.....	1,925	07.7
Northern	13,975	1,248	.....	491	02.0
West Shore	62,307	1,058	1,293	2,086	08.3
New Haven	39,549	89	.....	1,279	05 1
Delaware, Lackawanna and Western	176,802	3,690	.....	5,822	23.3
Long Island	1,395	.....	.....	45	00.2
New Jersey Central	10,116	231	.....	334	01.3
Homer Ramsdell Transportation Co	25,362	671	.....	840	03 3
Lehigh Valley	36,529	1,268	.....	1,219	04.9
Other sources	18,000	.....	.....	600	02.4
Total cans	749,764	19,818	6,150	.....	.....

Total cans crude milk	749,765
Total cans cream	19,818
Total cans unsweetened condensed milk	6,150
Total cans all kinds	775,733
Daily average crude milk, cans	24,186
Daily average cream, cans	639
Daily average unsweetened condensed milk, cans	198
Average price crude milk to producer, per quart	$0.025
Average platform price per can, freight paid	1.30

Receipts of crude milk, unsweetened condensed milk and cream in New York by the railroads and other sources for the month of November, 1899.

RAILROADS.	Cans crude milk,	Cans cream.	Cans condensed milk.	Daily average cans milk, cream and condensed milk	Per cent over each route.
Erie	121,537	3,20	2,650	4,246	17 7
New York Central and Harlem	61,677	656	1,564	2,1 0	08.6
Ontario	126,030	4,616	.....	4,357	17.6
Susquehanna	55,479	1,006	827	1,910	07.7
Northern	12,238	1,196	.....	448	0 .8
West Shore	62,923	1,597	1,957	2,2 6	09 0
New Haven	35,339	70	.....	1,180	04.8
Delaware, Lackawanna and Western	161,590	2,900	.....	5,583	22.6
Long Island	725	.....	.....	24	00.1
New Jersey Central	6,325	187	.....	247	00 8
Homer Ramsdell Transportation Co.	22,766	746	.....	784	03.2
Lehigh Valley	30,940	63	.....	1 052	04.3
Other sources	18.000	.....	.....	600	02.4
Total cans	718,629	16,810	6,998		

Total cans crude milk	718,629
Total cans cream	16,810
Total cans unsweetened condensed milk	6,998
Total cans all kinds	742,437
Total average crude milk, cans	23,954
Total ave age cream, cans	560
Total average unsweetened condensed milk, cans	233
Average price of crude milk to producer, per quart	$0.0263
Average platform price per can, freight paid	1.40

Receipts of crude milk, unsweetened condensed milk and cream in New York by the railroads and other sources for the month of December, 1899.

RAILROADS.	Cans crude milk.	Cans cream.	Cans condensed milk.	Daily average cans milk, cream and condensed milk.	Per cent. over each route.
Erie	129,592	3,796	1,966	4,366	18.5
New York Central and Harlem	72,028	1,217	1,389	2,408	10.2
Ontario	120,434	4,019	.....	4,034	17.1
Susquehanna	54,245	1,725	.....	1,805	07.7
Northern	12,826	1,221	.....	453	02.0
West Shore	62,669	778	2,442	2,125	09.0
New Haven	29,896	80	.....	967	04.1
Delaware, Lackawanna and Western	159,771	2,431	.....	5,232	22.2
Long Island	775	.....	.....	25	00.1
New Jersey Central	6,200	93	.....	203	00 8
Homer Ramsdell Transportation Co	13,353	342	.....	442	02.0
Lehigh Valley	27,440	396	.....	898	03.8
Other sources	18,600	.....	.....	600	0 .5
Total cans	707,829	16,698	5,797	.....	.....

Total cans crude milk	707,829
Total cans cream	16,698
Total cans unsweetened condensed milk	5,797
Total cans all kinds	730,324
Daily average crude milk, cans	22,833
Daily average cream, cans	539
Daily average unsweetened condensed milk, cans	187
Average price of crude milk to producer, per quart	$0.03
Average platform price per can, freight paid	1.44

In closing I wish to thank the agents in this division for the interest and zeal shown, likewise the various trades, with whom this Department has come in contact, for their hearty co-operation. The moral effect of such assistance is a large factor in the successful enforcement of the Agricultural Law.

Yours very truly,

FREDERICK J. H. KRACKE,
Assistant Commissioner.

Report of E. J. Preston.

Hon. Charles A. Wieting, *Commissioner of Agriculture:*

Dear Sir.— I herewith respectfully submit the annual report of the third division of the Department of Agriculture for the year ending September 30, 1899:

This division now embraces the counties of Columbia, Delaware, Dutchess, Greene, Orange, Putnam, Rockland, Sullivan, Ulster, and that part of Westchester not included in Greater New York.

My predecessor, the Hon. Henry S. Ambler, was in charge of this division from the beginning of the fiscal year, October 1, 1898, to January 1, 1899, when he resigned as Assistant Commissioner to assume his duties as State Senator. It is here befitting to publicly acknowledge my appreciation for the many courtesies shown, and information so freely extended to me by Senator Ambler upon the assumption of my new duties.

In order to familiarize myself with the division and its requirements, I have spent most of my time with the agents in their work, and can report, for so large and populous a section of the State, I have found it remarkably free from violations of Agricultural law, and full credit for same should be given to the untiring efforts of Mr. Ambler, and the able assistance rendered by the efficient agents of this division.

From January first to April tenth, the date of my appointment, the work done in the third division was directed by Assistant Commissioners George L. Flanders, of the first division, or F. J. H. Kracke, of the second division.

The healthfulness of the domestic animals in this division is excellent, as but few cases of disease have been reported which are subject to the control of this Department, a summary of which will appear hereafter.

OLEOMARGARINE.

No oleomargarine has been found in this division except near the lower borders adjoining Greater New York, and there in but few cases. Upon May fifth we were successful in arresting George W. Mulligan, of Kings Bridge, N. Y., an agent, while in the act of making a delivery of oleomargarine in one of the stores of Yonkers. He was arraigned before City Judge Kellogg, pleaded guilty, and was fined $50. This is the first offense of an oleomargarine agent which has been made in this division, and, I consider, has done much toward breaking up the sale of this prohibited article, as the case was thoroughly reported throughout the local press.

RENOVATED BUTTER.

The high price and scarcity of butter has led to the development of immense sales of "Renovated Butter," which, however, we find is being sold under the regulations of the law, all tubs and original packages being plainly marked as such. From personal observation of its sale, I would respectfully suggest that the law relative to the same should be so amended as to require all renovated butter sold at retail to be enclosed in a wrapper bearing the printed words in black ink in a conspicuous place — "Renovated Butter."

To-day but few purchasers of butter in retail quantities inspect the tub from which it is taken, and have no knowledge of the fact that they are probably getting the renovated article, as the law does not require the vendor to so proclaim it. The regular trade in honest butter is now being injured by this counterfeit, and the consumer is being imposed upon.

VINEGAR.

But comparatively little vinegar is being purchased from the farmer, who, being unable to guarantee its standard owing to unfamiliarity of test, the retailer is generally purchasing from the large vinegar manufacturer or traveling salesman. Trade has thus been deflected from many an honest farmer.

BOB VEAL.

In many places the shipping of "hog-dressed" calves has been entirely discontinued; at others the age and weight so increased that there is little cause for complaint. To thoroughly inspect the shipments from so large a territory, with its numerous railroads, will require more than one inspector, as at present assigned. A report of seizures made will be found in Mr. Rivenburg's report.

MILK.

The increasing demands of Greater New York and other urban population of the State, together with supplying the necessary amount of milk required by the condenseries, has led the farmers of Delaware, Dutchess, Orange, Putnam and Sullivan counties to generally turn their undivided attention to the production of this most necessary article of food.

Owing to the immense quantities of this product now being produced in and passing through this division, together with the necessity of knowing that it reaches the consumer in its original and unadulterated condition, has led this Department to turn the greater part of its attention to its inspection, with most satisfactory results, so far as the quality of the first delivery of the product is concerned.

But a small per centum of this milk is being shipped direct from the producer to the city retailer, it being mostly delivered to the local creamery or condensery.

Owing to the very general use at the receiving stations of the Babcock test for the purpose of ascertaining the amounts of butter fat, and the lactometer for the determination of its specific gravity, the producer is being constantly watched as to the quality of the milk he delivers. The per centum of adulteration by the producer is now small. Unfortunately this knowledge, so useful to the creamery man in obtaining pure milk, has been turned to a source of profit by not a few wholesalers, but at the expense of their honesty and justice to the retailer and consumer. It is an assured fact that much high-grade milk is being robbed of a part of its cream before shipment, but generally not in sufficient quantities to bring it below the three per centum of butter fats required by law. The proof of this misdemeanor necessary to receive a conviction when the milk is still equal to or above the required standard, is almost impossible to be procured, and the fraud goes on. If continued, it will be a strong argument in favor of requiring all milk to be sold under a guarantee of butter fat contained, with legal penalty for a deficiency. To illustrate my statement, I will present the following data gathered between similar dates which shows that the producer generally adulterates by addition of water, while the creameryman skims.

During the examination of milk delivered by 3,600 producers, 298 peddlers and from 152 creameries, 24 cases were made for adulteration; 17 cases were against producers, 4 against peddlers, and 3 against owners of creameries. This would show one dishonest delivery out of 212 among the producers, one out of 75 for the peddlers and one out of 51 for the creamery. The average analysis of the 17 cases made against the producer shows:

Fat	3.21
Solids not fat	7.39
Total solids	10.60

Average analysis of the herd samples of the above 17 cases shows:

Fat	4.33
Solids not fat	8.61
Total solids	12.94

The average analysis of four cases made against peddlers shows:

Fat	2.81
Solids not fat	8.35
Total solids	11.16

The average analysis of three cases made against creamerymen shows:

Fat	2.03
Solids not fat	8.91
Total solids	10.94

During the past year there has been inspected 52,148 cans of milk, 295 creamery inspections, and butter and vinegar inspections in 1,049 stores. There has been taken since April tenth 73 samples, which have been sent to the chemist for analysis, of which six were oleomargarine, one vinegar and 66 milk; of the latter 23 were herd samples.

CONTAGIOUS DISEASES OF ANIMALS.

The following is a summary of the examinations made on reports of supposed contagious diseases among domestic animals subject to the control of this Department:

April 26, 1899, the Board of Health of Gardiner, Ulster county, N. Y., reported what they supposed to be contagious pleuro-pneumonia in the dairy herd of Mrs. Lulu McGarry, several cows having died. H. B. Ambler, D. V. S., after a post-mortem examination of two cows, reported tuberculosis and parasitic disease (modular) of the intestines.

April 28, 1899, at L. H. Whyland's, Chatham Centre, Columbia county, N. Y., several swine died. A post-mortem by Dr. Ambler revealed pneumonia and pleurisy, but no specific bacteria were discovered by Prof. Moore, bacteriologist at Cornell University. The disease did not spread.

On May 29, 1899, a complaint was received from Mr. F. B. Thurber, of New York City, that his cows on farm at Onteora Park, Greene county, N. Y., were dying from supposed contagious disease. Dr. Ambler reported that all cattle on the farm at the time of examination were apparently healthy, but that investigation showed that cows had died during previous winter from neglect and exposure.

In June, examinations were made at Craryville, Columbia county, N. Y., of swine belonging to James Whitbeck, Norman Niver and William Ten Broeck. All had lost hogs during the spring. Dr. Ambler held a post-mortem on one at Mr. Whitbeck's June second, but bacterial examination proved nothing. On June thirteenth he was assisted by Prof. Moore, but could find no subject favorable for post-mortem examination. This outbreak they reported as probably a mild form of swine plague which had practically spent its force before being reported.

From a request received from the Secretary of the State Board of Health by this Department, an investigation was made as to the disposition of milk produced by tuberculous cows owned by Eugent Myers of Cuddybackville, Orange county, N. Y. The milk was found to have been carefully buried, and never had been offered for sale after the diseased condition of the cows had become known to Mr. Myers.

DETAILED REPORT OF WORK PERFORMED.

The following tables give a complete detailed report of the work performed by each employe in the third division of the Department, between September 30, 1898, and October 1, 1899:

REPORT OF WALTER J. BENNETT.

Number of days attending court	7
Number of days obtaining evidence	16
Number of days traveling, office work, etc	59
Number of days inspecting milk	134
Number of days inspecting herds	2
Number of days inspecting vinegar	13
Number of days inspecting butter	32
Total number of days	263

Number of creameries inspected	63
Number of condenseries inspected	5
Number of butter factories inspected	4
Number of cheese factories inspected	3
Number of shipping stations inspected	47
Number of cows inspected	563
Number of stores inspected for vinegar and butter	879
Number of restaurants inspected for butter	106
Number of tubs of butter inspected	3,196
Number of barrels of vinegar inspected	467
Number of stores inspected for milk	78
Number of cases of bottled milk examined	892
Total number of bottles of milk examined	10,704
Number of herds inspected	18
Number of milk peddlers' wagons inspected	275

Number of creamerymen's milk inspected on delivery at boat and railroad stations	109
Number of dairymen's milk inspected on delivery at creameries and railroad stations	2,853
Number of dairymen's milk inspected on delivery at butter factories	121
Number of dairymen's milk inspected on delivery at cheese factories	107
Number of dairymen's milk inspected on delivery at condenseries	323

Number of cans creamerymen's milk inspected at boat and railroad stations	2,519
Number of cans dairymen's milk inspected at creameries and railroad stations	9,730
Number of cans store milk inspected	202
Number of cans of peddler's milk inspected	836
Number of cans dairymen's milk inspected on delivery at butter factories	324
Number of cans of dairymen's milk inspected at condenseries and cheese factories	1,008
Number of cans milk inspected at farms	40
Total number cans milk inspected	14,659

Estimated number miles traveled	10,879
Number samples milk delivered to chemist	46
Number samples vinegar delivered to chemist	3
Number samples oleomargarine delivered to chemist	6

REPORT OF R. H. PALMER.

Number of days attending court	8
Number of days inspecting milk	128

Number of days inspecting vinegar	20
Number of days inspecting butter	11
Number of days inspecting butter and cheese factories,	18
Number of days obtaining samples of linseed oil and Paris green	6
Number of days traveling	16
Total number of days	207

Number of creameries inspected	80
Number of condenseries inspected	2
Number of butter factories inspected	14
Number of cheese factories inspected	6
Number of shipping stations inspected	61
Number of cows inspected	286
Number of stores inspected for vinegar and butter	650
Number of restaurants inspected for butter	12
Number of tubs butter inspected	1,755
Number of barrels of vinegar inspected	320
Number of stores inspected for milk	40
Number of cases bottled milk inspected	1,200
Number of herds inspected	20
Number of milk peddlers inspected	200
Number of creamerymen's milk inspected on delivery at boat and railroad stations	118
Number of dairymen's milk inspected on delivery at boat and railroad stations	2,509

Number of cans creamery milk inspected in transit to New York	6,000
Number of cans dairymen's milk inspected at creameries, butter factories, etc	10,200
Total number cans	16,200

Estimated number miles traveled	10,000
Number samples milk delivered to chemist	19
Number samples oleomargarine delivered to chemist	2
Number samples vinegar delivered to chemist	6
Number samples linseed oil taken for analysis	10
Number samples Paris green taken for analysis	8

REPORT OF M. DUGAN.

Number of days attending court	4
Number of days inspecting milk	145
Number of days inspecting vinegar	16
Number of days inspecting butter	10
Number of days inspecting herds	6
Number of days obtaining evidence	16
Number of days traveling, inspecting stores, restaurants, etc.	25
Total number days	222

Number of creameries inspected	113
Number of condenseries inspected	2
Number of butter factories inspected	1
Number of cheese factories inspected	1
Number of shipping stations inspected	50
Number of cows inspected	184
Number of stores inspected for butter and vinegar	516
Number of restaurants inspected for butter	17
Number of stables inspected	6
Number of cases of bottled milk inspected	1,315
Number of milk peddlers inspected	197
Number of creamerymen's milk inspected on delivery at boat and railroad stations	31
Number of dairymen's milk inspected on delivery at creameries and railroad stations	2,464

Number of dairymen's milk inspected on delivery at butter factories and condenseries	61
Number of dairymen's milk inspected on delivery at cheese factories	31
Number cans of creamerymen's milk inspected on delivery at boat and railroad stations	3,835
Number cans of dairymen's milk inspected on delivery at creameries and railroad stations	8,897
Number cans of dairymen's milk inspected on delivery at butter factories	96
Number cans of dairymen's milk inspected on delivery at cheese factories	215
Number cans of peddler's milk inspected	1,786
Number cans of store milk inspected	348
Total number of cans	15,177
Estimated number miles traveled	6,143
Number of complaints made	10
Number of appearances in cases	2
Number of samples delivered to chemist	24

REPORT OF J. H. BEVIER.

Employed in third division from July 10th to September 30, 1899.

Number of days attending court	4
Number of days inspecting milk	47
Number of days inspecting herds	4
Number of days obtaining evidence	6
Number of days inspecting vinegar	2
Number of days inspecting butter	2
Total number of days	65

Number of creameries inspected	39
Number of condenseries inspected	2
Number of butter factories inspected	3
Number of shipping stations inspected	13
Number of cows inspected	138
Number of stores inspected for vinegar and butter	53
Number of restaurants inspected for butter	8
Number of milk peddlers inspected	163
Number of cases bottled milk inspected	168
Number of bottles of bottled milk inspected	2,016
Number of creamerymen's milk inspected on delivery at boat and railroad stations	19
Number of dairymen's milk inspected on delivery at creameries and railroad stations	841
Number of dairymen's milk inspected on delivery at butter factories	54
Number of cans creamerymen's milk inspected on delivery at boat and railroad stations	1,983
Number of cans dairymen's milk inspected on delivery at creameries and railroad stations	3,194
Number of cans dairymen's milk inspected on delivery at butter factories	182
Number of cans store milk inspected	113
Number of cans dairymen's milk inspected on delivery at condenseries	413
Number of cans peddler's milk inspected	227
Total number of cans	6,112
Estimated number of miles traveled	2,173
Number of complaints made	3
Number of appearances in cases	2
Number of samples delivered to chemist	7

REPORT OF M. S. RIVENBURG.

Number of days inspecting railroads and shipping points for "bob veal"	112
Number of days assisting in milk inspection	17
Number of days obtaining evidence	14
Number of seizures made	22
Estimated number of miles traveled	12,475

Prosecutions.

The following is a statement of prosecutions from September 30, 1898, to January 1, 1899:

MILK.

CASE No. 5124.

September 30, 1899, case pending.
Witnesses: M. Dugan, F. C. Slaughter.
Chemist: Edward J. Wheeler.
Counsel: James W. Husted.

VINEGAR.

CASE No. 1863

September 30, 1899, case pending.
Witnesses: J. T. Norton, Walter J. Bennett.
Chemist: Edward J. Wheeler.
Counsel: James W. Husted.

CASE No. 1865.

September 30, 1899, case pending.
Witnesses: J. T. Norton, Walter J. Bennett.

Chemist: Edward J. Wheeler.
Counsel: James W. Husted.

CASE No. 1866.

September 30, 1899, case pending.
Witnesses: J. T. Norton, Walter J. Bennett.
Chemist: Edward J. Wheeler.
Counsel: James W. Husted.

OLEOMARGARINE.

CASE No. 2466.

Witnesses: R. H. Palmer, Charles Sears.
Chemist: Jos. F. Geisler.
Counsel: ————

The following is a statement of prosecutions in the third division from April 10, 1899, to September 30, 1899:

MILK.

CASE No. 6461.

September 30, 1899.
Witnesses: Walter J. Bennett, F. C. Slaughter.
Chemist: Edward J. Wheeler.
Counsel: Wm. B. Daley.

CASE No. 6462.

September 30, 1899, case pending.
Witnesses: F. C. Slaughter, M. S. Rivenburg.
Chemist: Edward J. Wheeler.
Counsel: H. M. Wiggins.

CASE No. 5036.

Case not assigned to counsel.
Witnesses: Walter J. Bennett, E. J. Preston.
Chemist: Edward J. Wheeler.

CASE No. 2689.

September 30, 1899, case pending.
Witnesses: M. Dugan, F. C. Slaughter.
Chemist: Edward J. Wheeler.
Counsel: H. W. Wiggins.

CASE No. 5039.

September 30, 1899, case pending.
Witnesses: Walter J. Bennett, W. L. Kinney.
Chemist: Edward J. Wheeler.
Counsel: Wm. L. Thornton.

CASE No. 5050.

Case not assigned to counsel.
Witnesses: R. H. Palmer, Walter J. Bennett.
Chemist: Edward J. Wheeler.

CASE No. 6464.

September 30, 1899, case pending.
Witnesses: Walter J. Bennett, R. H. Palmer and M. Dugan.
Chemist: Edward J. Wheeler.
Counsel: H. W. Wiggins.

CASE No. 5040.

September 30, 1899, case pending.
Witnesses: Walter J. Bennett, M. Dugan.
Chemist: Edward J. Wheeler.
Counsel: P. Edgar Ackert.

CASE No. 6470.

September 30, 1899, counsel not yet assigned.
Witnesses: Walter J. Bennett, F. C. Slaughter.
Chemist: Edward J. Wheeler.

CASE No. 6501.

September 30, 1899, counsel not yet assigned.
Witnesses: Walter J. Bennett, F. C. Slaughter.
Chemist: Edward J. Wheeler.

CASE No. 6502.

September 30, 1899, counsel not yet assigned.
Witnesses: Walter J. Bennett, F. C. Slaughter.
Chemist: Edward J. Wheeler.

CASE No. 5042.

September 30, 1899, counsel not yet assigned.
Witnesses: Walter J. Bennett, E. J. Preston.
Chemist: Edward J. Wheeler.

CASE No. 6467.

September 30, 1899, case pending.
Witnesses: R. H. Palmer, J. W. Vaugh.
Chemist: Edward J. Wheeler.
Counsel: H. W. Wiggins.

CASE No. 5043.

September 30, 1899, counsel not yet assigned.
Witnesses: Walter J. Bennett, E. J. Preston.
Chemist: Edward J. Wheeler.

CASE No. 5044.

September 30, 1899, counsel not yet assigned.
Witnesses: Walter J. Bennett, E. J. Preston.
Chemist: Edward J. Wheeler.

CASE No. 5045.

September 30, 1899, case pending.
Witnesses: Walter J. Bennett, E. J. Preston.
Chemist: Edward J. Wheeler.
Counsel: P. Edgar Ackert.

CASE No. 8904.

September 30, 1899, case pending.
Witnesses: M. Dugan, J. H. Bevier.
Chemist: Edward J. Wheeler.
Counsel: Abraham Crosby.

CASE No. 6471.

September 30, 1899, case pending.
Witnesses: Walter J. Bennett, E. J. Preston.
Chemist: Edward J. Wheeler.
Counsel: Wm. B. Daley.

CASE No. 6472.

September 30, 1899, case pending.
Witnesses: Walter J. Bennett, E. J. Preston.
Chemist: Edward J. Wheeler.
Counsel: Wm. B. Daley.

CASE No. 6473.

September 30, 1899, case pending.
Witnesses: Walter J. Bennett, E. J. Preston.
Chemist: Edward J. Wheeler.
Counsel: Wm. B. Daley.

CASE No. 5047.

September 30, 1899, case pending.
Witnesses: Walter J. Bennett, E. J. Preston.
Chemist: Edward J. Wheeler.
Counsel: H. W. Wiggins.

CASE No. 5048.

September 30, 1899, case pending.
Witnesses: Walter J. Bennett, E. J. Preston.
Chemist: Edward J. Wheeler.
Counsel: H. W. Wiggins.

CASE No. 7642.

September 30, 1899, counsel not yet assigned.
Witnesses: M. Dugan, J. H. Bevier.
Chemist: Edward J. Wheeler.

CASE No. 8905.

September 30, 1899, counsel not yet assigned.
Witnesses: J. H. Bevier, E. J. Preston.
Chemist: Edward J. Wheeler.

CASE No. 8861.

September 30, 1899, counsel not yet assigned.
Witnesses: M. Dugan, J. H. Bevier.
Chemist: Edward J. Wheeler.

CASE No. 5069.

September 30, 1899, counsel not yet assigned.
Witnesses: M. Dugan, R. H. Palmer.
Chemist: Edward J. Wheeler.

CASE No. 5070.

September 30, 1899, counsel not yet assigned.
Witnesses: M. Dugan, R. H. Palmer.
Chemist: Edward J. Wheeler.

VINEGAR.

CASE No. 2071.

September 30, 1899, counsel not yet assigned.
Witnesses: F. C. Slaughter, M. S. Rivenburg.
Chemist: Edward J. Wheeler.

OLEOMARGARINE.

CASE No. 3270.

No action was brought in this case, and the party in whose store the oleomargarine was found was used as a witness to convict agent who was selling imitation butter.

Witnesses: Walter J. Bennett, W. C. Patrick.

Chemist: Edward J. Wheeler.

CASE No. 2004.

September 30, 1899, case pending.

Witnesses: Walter J. Bennett, E. J. Preston.

Chemist: Edward J. Wheeler.

Counsel: James W. Husted.

CASE No. 2006.

September 30, 1899, case pending.

Witnesses: Walter J. Bennett, E. J. Preston.

Chemist: Edward J. Wheeler.

Counsel: James W. Husted.

CASE No. 2005.

No counsel assigned in case.

Witnesses: Walter J. Bennett, E. J. Preston.

Chemist: Edward J. Wheeler.

CASE No. 2007.

Warrant issued May 5, 1899; held to bail for trial at Special Sessions, City of Yonkers, N. Y. Case called May 10, 1899, and

defendant pleaded guilty before Justice Kellogg, and was fined $50.

Witnesses: Walter J. Bennett, E. J. Preston.

Chemist: Edward J. Wheeler.

Counsel: Wm. Riley.

CASE No. 3273.

September 30, 1899, counsel not yet assigned.

Witnesses: W. C. Patrick, A. D. Clark.

Chemist: E. G. Love.

Respectfully submitted,

E. J. PRESTON,

Assistant Commissioner.

Report of T. James Owen.

Hon. Charles A. Wieting, *Commissioner of Agriculture:*

Dear Sir.— I have the honor to make my annual report of work performed in the service of the Department of Agriculture of the fourth division, comprising the counties of Essex, Fulton, Hamilton, Herkimer, Montgomery, Oneida, Oswego and Warren, for the year ending September 30, 1899:

Number of dairies inspected	6,119
Number of cans inspected	6,980
Peddler's milk inspected	514
Cans inspected (peddlers)	828
Cans inspected on trains	22
Samples delivered to chemist for analysis	57

VINEGAR.

Wholesale dealers and manufacturers inspected	2
Number barrels inspected	231
Stores inspected (barrels)	269
Number inspections (barrels)	511

BOB VEAL.

Number of bob veal seized	3

Two having paid the fine and the other will pay.

MILK.

The following is a list of milk samples taken during the year, the factory samples of which, upon analysis, were found below the State standard:

Factory Label No. 4968; not allowed to see the dairy milked.
Factory Label No. 6921; Herd Label No. 378.
Factory Label No. 2570; Herd Label No. 404.
Factory Label No. 6956; Herd Label No. 409.
Factory Label No. 6902; Herd Label No. 397.
Factory Label No. 6954; Herd Label No. 408.
Factory Label No. 6906; not allowed to see the dairy milked.
Factory Label No. 4972; Herd Label No. 381.
Factory Label No. 6911; Herd Label No. 392.
Factory Label No. 6959; Herd Label No. 411.
Factory Label No. 6910; Herd Label No. 398.
Factory Label No. 6958; Herd Label No. 412.
Factory Label No. 7464; Herd Label No. 394.
Factory Label No. 4971; Herd Label No. 372.
Factory Label No. 7461; Herd Label No. 696.
Factory Label No. 8951; Herd Label No. 1752.
Factory Label No. 7466; Herd Label No. 389.
Factory Label No. 6960; Herd Label No. 413.
Factory Label No. 7465; Herd Label No. 6920.
Factory Label No. 6934; Herd Label No. 374.
Factory Label No. 6915; Herd Label No. 383.
Factory Label No. 6936; Herd Label No. 355.
Factory Label No. 4965; Herd Label No. 4969.
Factory Label No. 6930; Herd Label No. 1751.
Factory Label No. 4970; Herd Label No. 388.
Factory Label No. 6962; Herd Label No. 414.
Factory Label No. 4967; Herd Label No. 380.
Factory Label No. 6963; Herd Label No. 415.
Factory Label No. 387; Herd Label No. 405.
Skim-milk Label Nos. 7460, 6931 and 6922.
Factory Label No. 6952; Herd Label No. 406.
Street Peddler's Label No. 7462.
Factory Label No. 6953; Herd Label No. 407.

VINEGAR.

Label Nos. 1478, 1475 and 1477.

BOB VEAL.

The so-called bob-veal law has been and is a perplexing law to enforce. During the months of February, March, April and the early part of May, we devoted considerable time in preventing the shipping of immature veal. In that line, we were fairly successful, especially when the carcass only was shipped. From general appearance we could generally discriminate between mature and immature veal. It was our habit to seize if the carcass did not exceed 60 pounds in weight, which we learned was very generally correct, but not infallible. But the great trouble was not in detecting its immaturity in the carcass, but when the calf was shipped standing, because the shipper was always willing to admit that he was shipping them into another State, and not for the purpose of slaughter for food. After the fine was imposed for such violations, shippers became exceedingly cautious in their fraudulent traffic, and in some places entirely stopped.

LINSEED OIL AND PARIS GREEN.

The linseed oil and Paris green laws were very generally observed. But two violations of the linseed oil law occurred in this division so far as I am aware, and those not of a willful nature.

MILK.

About the usual number of milk adulterations have taken place in the division, and in most cases the parties have paid the penalty, and all conceded that the method of taking samples, especially the herd sample, is just and fair, and I am of the the opinion that it prevents litigation because of the self-evident truth in the herd sample taken.

Renovated Butter.

The high price of dairy butter induced the importation of renovated butter from other States. The product is so nearly like creamery butter that considerable skill is required in detecting the fraud. This nefarious traffic has just begun in this section, and should dairy butter advance in price I have no doubt but that large quantities will be shipped into our larger cities and towns, but willful violations will be prosecuted to the full extent of the law.

But three cases of violation in the vinegar law has occurred in this division, and these were all in Utica. All promptly paid the penalty.

This year, to the farmers, has been one of prosperity. Milk, cheese and farm products have commanded good prices; better than for many a year. This in turn, has had its effect upon farm lands, creating a demand for farms, and better prices, which is gratifying to all.

No infectious diseases have invaded this section of the State in cattle, sheep or swine.

Respectfully submitted,

T. JAMES OWENS,

Assistant Commissioner.

Report of Charles T. Russell.

Hon. Charles A. Wieting, *Commissioner of Agriculture:*

Dear Sir.— Herewith I respectfully submit my second annual report as Assistant Commissioner of Agriculture of the work performed in the Department for the year terminating September 30, 1899, in this, the sixth division of the State, comprising the counties of Broome, Chenango, Cortland, Madison, Onondaga, Tioga and Tompkins.

In the agricultural industry of this division the dairying interests predominate, not alone as regards capital invested, but in the production and shipping of milk and its manufactured products. The excellent railroad facilities of this district for shipping milk to the New York markets have resulted in building up a large and increasing shipping business, in which respect the sixth division ranks second to none in the State.

CENSUS OF BUTTER AND CHEESE FACTORIES.

A list of the butter and cheese factories of this division, together with a census of their product, has never heretofore been correctly and accurately made, and by your request several weeks were spent in this work, the result of which has been of great value, not alone for statistical purposes, but in the assistance which it has afforded to our work in this district.

The tabulated report of the census of butter and cheese factories in this division shows the following result as to the number of factories in each of the several counties: Broome, 46; Chenango, 84; Cortland, 56; Madison, 64; Onondaga, 20; Tioga, 28, and Tompkins, 17. Total for the sixth division, 315 factories,

making 11,516,962 pounds of cheese, and 8,301,173 pounds of butter, being nearly 40 per cent. of the amount of butter reported by the 1896 factory census for the entire State.

A map recently prepared, giving the location of all butter and cheese factories of this division, shows a total number of 339 factories. This, of course, does not include the large number of milk-shipping stations that manufacture neither butter or cheese.

SHIPPING INTERESTS, MILK INSPECTIONS, ETC.

The enactment of the agricultural law has been the important factor which has resulted in the growth of the shipping interests to their present proportions. By the enforcement of the law the quality of the milk sold has been kept at a legal standard, and its quality has been so much improved that it resulted necessarily in a largely increased consumption, and increased the demand to the extent that the producer feels assured that the milk shipped by him is now sold in the New York market instead of being displaced by the adulterated mixture, thus guaranteeing to him his legitimate trade.

It is well known that since the agricultural law was enacted the increase in the milk supply of the cities of the State far exceeds in proportion the increase in population. But little more than 20 years ago Orange county, about 40 miles from New York, was noted as a butter-producing county, but the demand for milk for the New York market has so increased that, by the 1896 census report, Orange county had not a single butter or cheese factory, the factories having been supplanted by the milk-shipping stations, which had gradually extended their territory until at the present time covering this division and extending even into Ontario county.

Within the year there has been a marked increase in the patronage of the milk-shipping stations of this division by reason of the agitation of the Five States' Milk Producers' Association, an

association of the milk producers for the New York market from the States of New York, New Jersey, Pennsylvania, Connecticut and Massachusetts, who have combined together for the purpose of seeking better prices for the producer.

The requests made for milk inspections from consumers in cities and towns, shipping stations and patrons of butter and cheese factories, have been so frequent that, to satisfy the public demand, this portion of our work must necessarily occupy a very large part of our time. In this connection, I desire to state that while the number of employes of this division have hardly been adequate to the necessities of the work, yet we have endeavored to perform our duties to the best of our ability. I regret to report the decease of Agent Charles F. Nash, who had long been a faithful employe of this division, his death occurring on the 25th day of March, 1899. Since October, 1898, to the time of his decease, Mr. Nash had been incapacitated by sickness from doing much of the active work of this division, since which time this division has had but one agent, Mr. A. M. Kibbe.

By your kindness, and that of Assistant Commissioner Twitchell, of Buffalo, Mr. C. J. Standart of that city was assigned to duty in this division from June first to November first.

CROP REPORTS AND STATE CHEESE BRANDS.

Since the appointment of Mr. F. E. Dawley, as State Statistician, crop statistics for this division have been reported by the employes of the State Agricultural Department, in which there has been a marked improvement both as to system and accuracy over the older methods formerly in vogue. I at first endeavored to report each of the several counties personally, but have since selected able and reliable correspondents from each county, who have rendered valuable assistance in connection with the work of the employes of this division.

As the regulations of the Agricultural Department in relation to the State cheese brands require all factories at the close of

the season to return such brands, that they may not fall into irresponsible hands and be improperly used to the detriment of the cheese industry, several weeks were spent in the recovery of such brands as were not so returned.

VEAL, OLEOMARGARINE AND RENOVATED BUTTER.

In the months of March and April, before there was any penalty provision supplied in the law against the illegitimate traffic in bob veal, by your request Agent Kibbe and myself traveled on every railroad in this division and inspected the veals on trains, and visited every place where the law was reported to be violated. We found several violations of the law, and in such cases we visited the offending party, explained the law and warned him that further violations would be prosecuted; in each instance the parties expressed their gratitude at our method of procedure, and desisted in further violation. There are three cases now pending in which the veals were shipped from this division and were seized aboard trains by State veal inspectors.

The law in relation to the manufacture of oleomargarine and renovated butter has been generally complied with in this division, but I have recently received information which causes me to suspect the present existence of such violations, to which I intend to give my immediate attention.

TUBERCULOSIS.

I have made some personal investigation of the condition of cattle in this division, and find them generally in good condition and receiving proper care. As regards tuberculosis among cattle, on the sixteenth day of May I reported to the State Board of Health that a herd belonging to Dewayne Brown, of East Pharsalia, Chenango county, were suspected of being tuberculous. On June thirteenth they were inspected by a veterinarian of the State Board of Health and 21 out of 26 were condemned as tuberculous. There being no State appropriation provided for reimbursing the owner for the destruction of the cattle, they were

placed in quarantine by the State Board of Health. On July nineteenth, at Syracuse, N. Y., the condemned cattle of this herd were reinspected and publicly destroyed in presence of the Tuberculosis Investigating Committee appointed by the New York State Legislature. There was also in Chenango county one other herd of 10 cows belonging to J. H. Sarles, of New Berlin, which were in an advanced stage of tuberculosis, and were condemned and placed in quarantine by the State Board of Health. In this case the herd was afterward found in the neighborhood of Waterville, Oneida county, and the question arising as to whether the quarantine had been violated by so disposing of the cattle, and no person would claim them, they were destroyed by a local officer.

In Tioga county a portion of two herds belonging respectively to C. D. Tallmadge, of Wilseyville, and George Parsons, of Berkshire, were condemned as tuberculous, and placed in quarantine by the State Board of Health.

In Broome county two cows out of each of the two herds belonging respectively to Sidney Coon, of Whitney's Point, and Ralph Seymour, of Binghamton, were so condemned. In Cortland county one cow out of one herd, and three cows out of another herd were so condemned, belonging respectively to Horace Martin, of East Freetown, and Fred Jennings, of Hunt's Corners. Under the regulations of the local board of health of the city of Syracuse, all cows from which the milk supply of that city is furnished are required to be tuberculin tested. The license to sell milk in the city is obtained only after filing a certificate with the city clerk showing that the cows from which the milk is produced are free from tuberculosis or other disease from which the milk might be infected.

There are about 4,567 cows from which the city milk supply is furnished; these cows were all so tested principally in the months of March, April, May and June. About four per cent. of the cattle so tested were condemned as tuberculous. Those which

were but slightly tuberculous were killed and sold as beef, while those in a more advanced stage of the disease were quarantined and destroyed by the owners. Syracuse is the first city in the State to adopt this system in regard to its milk supply, and is at the present time, I believe, the only city in the State in which that system is in operation. I do not desire to here enter into any discussion regarding the merits of this system, especially as those matters are now under thorough investigation, and I mention the above facts as matters of interest pertaining to the dairies, and more especially the milk supply of this division over which the Agricultural Department exercises jurisdiction.

DEPARTMENT WORK.

Before closing I desire to note the great progress and improvement in the work of the State Agricultural Department and the practical results of the same during the last several years. A comparison of the reports of the agents of this Department at the present time with those of several years ago as to the services performed, is indicative. Great progress and advancement has been made in the work of Farmers' Institutes, and a correspondingly marked improvement in the education of the people on agricultural matters. The work of Department experts, and butter and cheese instruction has shown practical results in the improvement of our dairies and dairy products, and I beg to be allowed to say, that the people are to be congratulated on their assurance of the continuation of such administration of this Department, in the reappointment of the present Commissioner within the last year.

The following is a detailed report of the work performed by the agents of this division from October 1, 1898, to September 30, 1899, both dates inclusive:

REPORT OF A. M. KIBBE.

Number of days inspecting milk.....	160
Number of days on special duty, reports, etc.....	30

Number of days inspecting vinegar	10
Number of days recovering State cheese brands	19
Number of days on census of butter and cheese factories	38
Number of days inspecting veal	19
Number of days obtaining evidence	4
Number of days attending court	1
Number of days conferring with Assistant Commissioner	6
Number of days inspecting creameries as to sanitary condition	3
Number of days inspecting Paris green	1
Total number of days	291

Number of railroad milk-shipping stations inspected as to condition	77
Number of cheese factories inspected as to condition	51
Number of butter creameries inspected as to condition,	45
Number of city dairy associations inspected	5
Number of milk peddlers inspected	235
Number of stores inspected where milk is sold	10

Number of dairymen's milk inspected on delivery at cheese factories	1,150
Number of dairymen's milk inspected at butter creameries	1,429
Number of dairymen's milk inspected on delivery at city milk associations	141
Number of dairymen's milk inspected at milk- shipping stations	1,933

Number of cans of dairymen's milk inspected on delivery at railroad milk stations	4,912
Number of cans of dairymen's milk inspected on delivery at cheese factories	2,764
Number of cans of dairymen's milk inspected on delivery at butter creameries	4,869
Number of cans of dairymen's milk inspected on delivery at city milk associations	692
Number of cans of peddlers' milk inspected	800
Number of cans of milk inspected in stores	30
Number of cans of creamerymen's milk inspected on platforms at railroad stations	3,100
Total number of cans of milk inspected	17,167

Number of samples of milk delivered to chemists, besides corresponding herd samples	13
Number of samples of milk delivered to chemists and taken with C. T. Russell and C. J. Standart	2
Whole number of samples of milk so delivered to chemist	15

Number of samples of vinegar delivered to chemists and taken with C. T. Russell and C. F. Nash	18
Whole number of samples of milk and vinegar delivered to chemist	31
Estimated number of miles traveled	10,40[illegible]

REPORT OF C. J. STANDART.

C. J. Standart, of Buffalo, N. Y., was temporarily assigned to duty in this division on the 1st day of June, 1899, and performed the following work up to September 30, 1899:

Number of days inspecting milk	91
Number of days inspecting butter	2
Number of days inspecting stables	2
Number of days, special duty, work on census, reports, etc.	27
Total number of days	122

Number of milk peddlers inspected	222
Number of railroad milk-shipping stations inspected	37
Number of cheese factories inspected	36
Number of butter creameries inspected	15
Number of stores inspected where milk is sold	6
Number of stores inspected (butter)	9

Number of dairymen's milk inspected on delivery at railroad milk-shipping stations	1,154
Number of dairymen's milk inspected on delivery at cheese factories	951
Number of dairymen's milk inspected on delivery at butter creameries	748

Number of cans of dairymen's milk inspected on delivery at railroad milk-shipping stations	2,662
Number of cans of dairymen's milk inspected on delivery at cheese factories	1,506
Number of cans of dairymen's milk inspected on delivery at butter creameries	1,996
Number of cans of peddlers' milk inspected	482
Total number of cans of milk inspected	6,646

Number of specimens of butter examined	28
Number of samples of milk below standard, delivered to chemist, besides corresponding herd-duplicates (of the 24 samples so delivered, two were taken by myself, C. T. Russell and A. M. Kibbe together, and one by myself and C. T. Russell together)	24
Estimated number of miles traveled	2,327

REPORT OF CHARLES F. NASH.

Report of Charles F. Nash, from October 1, 1898, to March 22, 1899:

Mr. Nash was sick a portion of the above time and died March 25, 1899.

Number of days inspecting milk	35
Number of days inspecting vinegar	7
Number of days recovering State cheese brands	8
Number of days inspecting herds	10
Number of days inspecting stables	1
Number of days on special duty, reports, etc	20
Total number of days	77

Number of milk peddlers inspected	90
Number of railroad milk-shipping stations inspected	17
Number of cheese factories inspected	7
Number of butter creameries inspected	1
Number of herds inspected	9
Number of stables inspected	1

Number of dairymen's milk inspected on delivery at creameries	10
Number of dairymen's milk inspected on delivery at cheese factories	129
Number of dairymen's milk inspected on delivery at milk stations	425

Number of cans of dairymen's milk inspected on delivery at creameries	10
Number of cans of dairymen's milk inspected on delivery at cheese factories	314
Number of cans of dairymen's milk inspected on delivery at milk stations	1,038
Number of cans of peddler's milk inspected	311
Number of cans of creamerymen's milk inspected on trains and railroad platforms	240
Total number of cans of milk inspected	1,913

Vinegar stores inspected	38
Barrels of vinegar inspected	132

Total number of samples of milk below standard delivered to chemist, besides corresponding herd-duplicate,	1
Total number samples of vinegar delivered to chemist (of the 21 vinegar samples so delivered, three were taken by myself, and 18 by myself, C. T. Russell and A. M. Kibbe, together)	21
Estimated number of miles traveled	700

The three samples of vinegar above mentioned were not reported for prosecution, as Mr. Nash's mind was weakened by sickness, and there were no reliable witnesses as to taking of the samples.

Prosecutions.

The following is a report of actions settled and pending for violation of the agricultural law in the sixth division of the Agricultural Department of the State:

MILK.

LABEL No. 4285.

Case referred to Charles R. Coville, August 31, 1898, and settled December 31, 1898, by the payment by defendant of $50.

Witnesses: Chas. T. Russell, Thos. Vivyan.
Chemist: Hugh C. Troy.
Attorney: Charles R. Coville.

LABEL No. 6023.

Action commenced in Supreme Court October 7, 1899. Case settled October 16, 1899, by the payment by defendant of $75.

Witnesses: A. M. Kibbe, D. R. Faulkner.
Chemist: Hugh C. Troy.
Attorney: Nathan L. Miller.

LABEL No. 6048.

Case referred to Nathan L. Miller, October 18, 1899, and pending settlement.

Witnesses: A. M. Kibbe, D. R. Faulkner.
Chemist: Hugh C. Troy.
Attorney: Nathan L. Miller.

LABEL No. 4279.

Action commenced in Supreme Court November 13, 1897, and settled January 5, 1899, by the payment by defendant of $25.

Witnesses: Chas. F. Nash, F. W. Church.
Chemist: Hugh C. Troy.
Attorney: A. O. Briggs.

LABEL No. 6002.

Case referred to A. O. Briggs, January 27, 1898. Defendant left $25 with the attorney with the agreement to pay $15 more,

making $40 in settlement of case. The $15 has not yet been paid, and settlement is still pending.

Witnesses: Chas. T. Russell, B. M. Hallock.

Chemist: Hugh C. Troy.

Attorney: A. O. Briggs.

LABEL No. 6001.

Case referred to A. O. Briggs, January 27, 1898. Summons and complaint were afterward issued, but after further investigation, attorney found defendant had perfect defense, was irresponsible, and by advice of Attorney-General recalled papers before answer, and discontinued the case.

Witnesses: A. M. Kibbe, Chas. T. Russell.

Chemist: Hugh C. Troy.

Attorney: A. O. Briggs.

LABEL No. 4280.

Summons in Supreme Court isued by attorney September 8, 1897; he was instructed by the Attorney-General's office not to proceed with case until further notice; attorney has since received no such notice, and after further investigation was satisfied defendant had perfect defense and was irresponsible, and case was discontinued.

Witnesses: Chas. F. Nash, F. W. Church.

Chemist: Hugh C. Troy.

Attorney: A. O. Briggs.

LABEL No. 4336.

Case referred to Abram C. Crosby, October 20, 1897, and settled October 16, 1899, by the payment by defendant of $30.

Witnesses: C. F. Nash, R. O. Tupper.

Chemist: Hugh C. Troy.

Attorney: Abram C. Crosby.

LABEL No. 4318.

Action commenced in Supreme Court September 22, 1899, and settled October 16, 1899, by the payment by defendant of $50.

Witnesses: A. M. Kibbe, Wm. E. Greeman.

Chemist: Hugh C. Troy.

Attorney: Abram C. Crosby.

LABEL No. 4339.

Action commenced in Supreme Court September 18, 1899, and settled September 28, 1899, by the payment by defendant of $27.20.

Witnesses: C. F. Nash, Geo. W. Prince.

Chemist: Hugh C. Troy.

Attorney: Abram C. Crosby.

LABEL No. 6022.

Case referred to James T. Rogers, October 2, 1899, and pending settlement.

Witnesses: A. M. Kibbe, J. W. Cardavoyne.

Chemist: Hugh C. Troy.

Attorney: James T. Rogers.

LABEL No. 6025.

Case referred to James T. Rogers, October 18, 1899, and pending settlement.

Witnesses: A. M. Kibbe, F. D. Silvernail.

Chemist: Hugh C. Troy.

Attorney: James T. Rogers.

LABEL No. 6020.

Case referred to James T. Rogers, October 18, 1899, and pending settlement.

Witnesses: A. M. Kibbe, Chas. Paddleford.

Chemist: Hugh C. Troy.

Attorney: James T. Rogers.

LABEL No. 6019.

Case referred to James T. Rogers, October 18, 1899, and pending settlement.

Witnesses: A. M. Kibbe, Alvin B. Root.

Chemist: Hugh C. Troy.

Attorney: James T. Rogers.

LABEL No. 5968.

Case referred to James W. Welch, February 7, 1899, and settled April 1, 1899, by the payment by defendant of $25.

Witnesses: C. F. Nash, Enos M. Card.

Chemist: Hugh C. Troy.

Attorney: James W. Welch.

LABEL No. 4328.

Case referred to James W. Welch, February 7, 1899, and settled June 20, 1899, by the payment by defendant of $45.

Witnesses: A. M. Kibbe, Chas. Decker, Chas. T. Russell.

Chemist: Hugh C. Troy.

Attorney: James W. Welch.

LABEL No. 5958.

Case referred to James W. Welch, February 7, 1899, and settled August 15, 1899, by the payment by defendant of $25.

Witnesses: A. M. Kibbe, C. F. Nash, C. T. Russell, T. Burke.
Chemist: Hugh C. Troy.
Attorney: James W. Welch.

LABEL No. 4321.

Action commenced in Supreme Court October 29, 1898. In this case a settlement has been arranged and now pending.
Witnesses: A. M. Kibbe, Orville Spicer.
Chemist: Hugh C. Troy.
Attorney: John E. Smith.

LABEL No. 4320.

Action commenced in Supreme Court September 30, 1898, and upon investigation it is found that defendant had a perfect defense. Stipulation not yet made by attorney.
Witnesses: A. M. Kibbe, Orville Spicer.
Chemist: Hugh C. Troy.
Attorney: John E. Smith.

LABELS Nos. 4253, 5964.

Action commenced in Supreme Court October 13, 1898, and settled December 17, 1898, by the payment by defendant of $50 and taxable costs.
Witnesses: C. F. Nash, C. R. Payne.
Chemist: Hugh C. Troy.
Attorney: John E. Smith.

LABEL No. 5957.

Action commenced in Supreme Court September 28, 1898. No answer to complaint was received and defendant's present residence unknown; as soon as he can be located attorney will apply for judgment.

Witnesses: Chas. T. Russell, Chas. F. Nash.

Chemist: Hugh C. Troy.

Attorney: John E. Smith.

LABEL No. 4308.

Action commenced in Supreme Court October 13, 1898, and pending settlement.

Witnesses: Chas. T. Russell, R. J. Warcup.

Chemist: Hugh C. Troy.

Attorney: John E. Smith.

LABELS Nos. 4281, 5956.

Action commenced in Supreme Court September 26, 1898, and defendant died in December, 1898; case will be discontinued.

Witnesses: C. F. Nash, Joseph Hamilton.

Chemist: Hugh C. Troy.

Attorney: John E. Smith.

LABEL No. 4288.

Action commenced in Supreme Court October 31, 1898, and settled January 28, 1899, by the payment by defendant of $25 and taxable costs.

Witnesses: Chas. T. Russell, Chas. F. Nash, E. M. Billings.

Chemist: Hugh C. Troy.

Attorney: John E. Smith.

LABELS Nos. 4264, 4274.

Action commenced in Supreme Court August 3, 1898. Witnesses dead; case will be discontinued.

Witnesses: C. F. Nash, C. O. York.

Chemist: J. F. McGregory.

Attorney: John E. Smith.

LABEL No. 6011.

Action commenced in Supreme Court October 28, 1899, and pending settlement.

Witnesses: C. J. Standart, William Morehead.

Chemist: Hugh C. Troy.

Attorney: Barton C. Meays.

LABEL No. 6013.

Action commenced in Supreme Court October 28, 1899, and settlement pending.

Witnesses: C. J. Standart, M. B. Standart, A. J. Eggleson.

Chemist: Hugh C. Troy.

Attorney: Barton C. Meays.

LABEL No. 6014.

Action commenced in Supreme Court, October 28, 1899, and settlement pending.

Witnesses: C. J. Standart, F. W. Church, A. M. Kibbe.

Chemist: Hugh C. Troy.

Attorney: Barton C. Meays.

LABEL No. 6015.

Action commenced in Supreme Court, October 30, 1899, and pending settlement.

Witnesses: C. J. Standart, Arthur Brush, A. M. Kibbe.

Chemist: Hugh C. Troy.

Attorney: Barton C. Meays.

LABEL No. 5976.

Case referred to James H. Throop, February 7, 1899, and settled February 27, 1899, by the payment by defendant of $75.

Witnesses: A. M. Kibbe, C. F. Nash.

Chemist: Hugh C. Troy.

Attorney: James H. Throop.

LABEL No. 5955.

Case referred to J. P. Allds, October 13, 1898, and afterward to James H. Throop, August 4, 1899, and settled August 28, 1899, by the payment by defendant of $50.

Witnesses: A. M. Kibbe, C. F. Nash.

Chemist: Hugh C. Troy.

Attorney: James H. Throop.

LABEL No. 5959.

Case referred to James H. Throop, February 7, 1899, and as no settlement was obtained, and witnesses being dead, case discontinued.

Witnesses: C. F. Nash, Hugh Bulger.

Chemist: Hugh C. Troy.

Attorney: James H. Throop.

LABEL No. 5974.

Case referred to J. P. Allds, October 13, 1898, and afterward referred to James H. Throop, August 4, 1899, and settled August 18, 1899, by the payment by defendant of $50.

Witnesses: A. M. Kibbe, C. F. Nash.

Chemist: Hugh C. Troy.

Attorney: James H. Throop.

LABEL No. 4333.

Case referred to James H. Throop, April 24, 1899, and settled May 10, 1899, by the payment by defendant of $50.

Witnesses: A. M. Kibbe, P. E. White.

Chemist: Hugh C. Troy.

Attorney: James H. Throop.

LABELS Nos. 4296, 4299.

Case referred to J. P. Allds, September 27, 1897, and again referred August 4, 1899, to James H. Throop, and as no settlement was effected, witnesses dead, case discontinued.

Witnesses: C. F. Nash, C. R. Wayne.

Chemist: Hugh C. Troy.

Attorney: James H. Throop.

LABEL No. 6026.

Case referred to James H. Throop, April 24, 1899, and settled May 10, 1899, by the payment by defendant of $50.

Witnesses: A. M. Kibbe, Chas. T. Green.

Chemist: Hugh C. Troy.

Attorney: James H. Throop.

LABELS Nos. 4295, 4297.

Case referred to J. P. Allds, September 27, 1897, and afterward referred on August 4, 1899, to James H. Throop, and settled August 21, 1899, by the payment by defendant of $25.

Witnesses: C. F. Nash, C. R. Payne.

Chemist: Hugh C. Troy.

Attorney: James H. Throop.

LABEL No. 4298.

Case referred to J. P. Allds, September 27, 1897, and afterward referred on August 4, 1899, to James H. Throop, and witnesses being dead, case was compromised and discontinued by attorney, upon payment of part of costs.

Witnesses: C. F. Nash, C. R. Payne.

Chemist: Hugh C. Troy.

Attorney: James H. Throop.

LABEL No. 8190.

Case referred to George S. Tarbell, October 18, 1899, and settled November 11, 1899, by the payment by defendant of $25.

Witnesses: C. J. Standart, M. B. Standart, G. W. Linsay.

Chemist: Hugh C. Troy.

Attorney: George S. Tarbell.

LABEL No. 8194.

Case referred to E. W. Cushman, October 18, 1899, and pending settlement.

Witnesses: C. J. Standart, Claud Griffith, A. M. Kibbe.

Chemist: Hugh C. Troy.

Attorney: E. W. Cushman.

LABEL No. 8191.

Case referred to E. W. Cushman, October 18, 1899, and pending settlement.

Witnesses: C. J. Standart, C. T. Russell, W. O'Brien.

Chemist: Hugh C. Troy.

Attorney: E. W. Cushman.

LABEL No. 8196.

Case referred to E. W. Cushman, October 2, 1899, and pending settlement.

Witnesses: C. J. Standart, M. B. Standart, M. E. Snow.

Chemist: Hugh C. Troy.

Attorney: E. W. Cushman.

LABEL No. 8197.

Case referred to Charles A. Fuller, October 2, 1899, and settled November 11, 1899, by the payment by defendant of $50.

Witnesses: C. J. Standart, M. B. Standart, Chas. Carpenter.

Chemist: Hugh C. Troy.

Attorney: Charles A. Fuller.

LABELS Nos. 6049, 8647, 8195.

Above cases under investigation.

LABELS Nos. 8644, 8642, 8643, 8646, 8648, 8612, 8649, 8650.

In above eight cases attorney has not yet been designated for the prosecution.

VEAL.

The following three "veal cases" pending are cases in which the veals were shipped from this division and seized on board trains by State veal inspectors outside this division, and with the particulars regarding these cases I am not acquainted. Cases are as follows:

PEOPLE v. G. L. McGREGORY, McCLURE SETTLEMENT, N. Y.

James T. Rogers, designated as attorney in this case, May 29, 1899, and returned case to Attorney-General to have another attorney designated in his stead.

PEOPLE v. S. PAGE, SOUTH EDMESTON, N. Y.

G. W. Ray, designated as attorney in this case, June 15, 1899, and returned case to Attorney-General for designation of another attorney, as he had not time to give to the prosecution of the case.

PEOPLE v. E. A. BURKE, BOUCKVILLE, N. Y.:

E. W. Cushman, designated as attorney in this case, May 29, 1899, and settlement pending.

VINEGAR.

LABEL No. 985.

Action commenced in Supreme Court, January 3, 1899, and settled February 15, 1899, by the payment of $25 and $10 costs.

Witnesses: A. M. Kibbe, C. F. Nash.

Chemist: Hugh C. Troy.

Attorney: Lawrence T. Jones.

LABEL No. 970.

Action commenced in Supreme Court, February 1, 1899, and settled February 2, 1899, by the payment by defendant of $25 and $15 costs.

Witnesses: A. M. Kibbe, C. F. Nash.
Chemist: Hugh C. Troy.
Attorney: Lawrence T. Jones.

LABEL No. 962.

Action commenced in Supreme Court, February 6, 1899, and settled May 26, 1899, by the payment by defendant of $25 and $15 costs.

Witnesses: A. M. Kibbe, C. F. Nash.
Chemist: Hugh C. Troy.
Attorney: Lawrence T. Jones.

LABEL No. 993.

Action commenced in Supreme Court, February 2, 1899, and pending settlement.

Witnesses: A. M. Kibbe, C. F. Nash.
Chemist: Hugh C. Troy.
Attorney: Lawrence T. Jones.

LABEL No. 952.

Action commenced in Supreme Court, February 3, 1899, and settled February 10, 1899, by the payment by defendant of $25 and $15 costs.

Witnesses: A. M. Kibbe, C. F. Nash.
Chemist: Hugh C. Troy.
Attorney: Lawrence T. Jones.

LABEL No. 986.

Action commenced in Supreme Court, June 26, 1899, and settled July 1, 1899, by the payment by defendant of $25 and $10 costs.

Witnesses: A. M. Kibbe, C. F. Nash.
Chemist: Hugh C. Troy.
Attorney: Lawrence T. Jones.

LABEL No. 967.

Action commenced in Supreme Court, February 3, 1899, suit now pending.

Witnesses: A. M. Kibbe, C. F. Nash.
Chemist: Hugh C. Troy.
Attorney: Lawrence T. Jones.

LABEL No. 951.

Action commenced in Supreme Court, February 1, 1899, and pending settlement.

Witness: A. M. Kibbe.
Chemist: Hugh C. Troy.
Attorney: Lawrence T. Jones.

LABEL No. 974.

Action commenced in Supreme Court, February 1, 1899, and settlement pending.

Witnesses: A. M. Kibbe, C. F. Nash.
Chemist: Hugh C. Troy.
Attorney: Lawrence T. Jones.

LABEL No. 973.

Action commenced in Supreme Court, February 1, 1899, settlement pending.

Witnesses: A. M. Kibbe, C. F. Nash.
Chemist: Hugh C. Troy.
Attorney: Lawrence T. Jones.

LABEL No. 975.

Action commenced in Supreme Court, June 23, 1899, and pending.

Witnesses: A. M. Kibbe, C. F. Nash.
Chemist: Hugh C. Troy.
Attorney: Lawrence T. Jones.

LABEL No. 972.

Action commenced in Supreme Court, July 5, 1899, suit pending.

Witnesses: A. M. Kibbe, C. F. Nash.
Chemist: Hugh C. Troy.
Attorney: Lawrence T. Jones.

LABEL No. 983.

Action commenced in Supreme Court, July 5, 1899, and suit pending.

Witnesses: A. M. Kibbe, C. F. Nash.
Chemist: Hugh C. Troy.
Attorney: Lawrence T. Jones.

LABEL No. 989.

Action commenced in Supreme Court, July 19, 1899, and settlement pending.

Witnesses: A. M. Kibbe, C. F. Nash.
Chemist: Hugh C. Troy.
Attorney: Lawrence T. Jones.

LABEL No. 994.

Action commenced in Supreme Court, June 23, 1899. Complaint has not been answered by defendant; he has moved to some other part of city since last directory was published; as soon as we locate him, attorney will apply for judgment.

Witnesses: A. M. Kibbe, C. F. Nash.
Chemist: Hugh C. Troy.
Attorney: Lawrence T. Jones.

LABEL No. 958.

Action commenced in Supreme Court, February 6, 1899, and settled November 11, 1899, by the payment by defendant of $25.

Witnesses: A. M. Kibbe, C. F. Nash.
Chemist: Hugh C. Troy.
Attorney: Lawrence T. Jones.

LABELS Nos. 968, 990, 992, 954, 955, 961.

The above cases in which the same attorney was designated, and at the same time as in the foregoing cases, are pending settlement, and no summons has been served.

In conclusion, allow me to thank you personally for the favors and assistance received in the prosecution of the work of this division, also the agents, chemists and counsel who, by their industry and zeal in the faithful discharge of their duties have so ably aided me.

Respectfully submitted,

CHARLES T. RUSSELL,

Assistant Commissioner.

Report of Verlett C. Beebe.

Hon. Charles A. Wieting, *Commissioner of Agriculture:*

Dear Sir.— I respectfully submit the following report of the work which was done in the Seventh Division of the Department of Agriculture for the year ending September 30, 1899:

The volume of the work done during such year has been greater than in any of the previous years during the time in which I have been acting as Assistant Commissioner in this division. The largest part of the work as usual has been concerned with investigation of milk and milk products. While the number of cases of milk adulteration reported is about equal to the number reported during the years 1897-1898, more examinations have been made and additional labor has been entailed by recent amendments to the Agricultural Law. April 15, 1899, an additional agent was appointed for this division and the entire force has been kept busy in the required work. The effect of the amendment of 1898 to the Agricultural Law, providing for an additional sample of milk being taken at the herd, has been as was naturally to be expected, that fewer violations have occurred.

As will be seen from the reports of the agents, considerable attention has been given to investigation of the condition of stables, and I believe that some benefit has resulted. During the year complaints were made to me that cans in which milk was shipped were not properly cleaned before shipment. My attention was particularly called to cans shipped to New York. I directed M. T. Cain, agent in this division under the so-called bob veal act, to make a thorough investigation along this line, and he

did so, with the result that such complaints became of less frequent occurrence.

I think that I may say that the condition of the milk and its products in this division during the year has been shown to be as good as was to be expected. The annexed reports of agents shows that the number of samples found to be below the standard fixed by law is not large when there is taken into consideration the extent and product of the division. With some reason we may expect that the coming year will show a number even less than its predecessor.

Little disease among cattle has been found. My attention has been called to but two instances. In September, black leg broke out and spread in a herd of cattle of Vascot Hotchkiss, in the town of Eagle, Wyoming county, New York, and resulted in the death of six head. As soon as my attention was called to the case, I notified a veterinarian and he treated the remainder of the herd, with the result that no others died. A neighbor of Mr. Hotchkiss also lost a calf with the same disease, and Dr. Kelly, the veterinarian, treated three head for him. October 11, 1899, my attention was called to a report that tuberculosis had broken out in a herd owned by a party living near the city of Elmira. The only foundation for this report, I found on investigation, to be from the fact that this party had lost a cow shortly prior to that time from natural causes.

Only four cases of adulterated vinegar are to be reported. The merchants are showing much caution in buying this article, and they have made frequent calls for tests before offering for sale.

The agent in this division, under the bob veal law, has been employed a number of months in his required work. No flagrant violations have been disclosed. He has devoted considerable time to familiarizing shippers and others with the provisions of the law, and has seemed to find a general and hearty co-operation.

But one case of rabies has been brought to my attention. The dog was killed and other dogs bitten by him were also promptly killed.

In the work in the division, I have been ably assisted by the force of agents, and I deem it proper to show recognition of their efforts by this statement. I am indebted to the Commissioner of Agriculture much for the help that he has given in the direction of our work along the proper channels.

The following is a report of the work which has been done by the State agents of the seventh division, Charles J. Morgenstern, Romaine A. French, Leon D. Spink and Michael T. Cain:

REPORT OF CHARLES J. MORGENSTERN.

Report of Charles J. Morgenstern for period from September 30, 1898, to June 17, 1899, and from July 17, 1899, to October 1, 1899:

Number of days inspecting milk	112
Number of days inspecting butter	7
Number of days inspecting vinegar	26
Number of days inspecting herds of cattle	5
Number of days taking samples of milk of herds	25
Number of days collecting State cheese brands	4
Number of days obtaining evidence in cases	1
Number of days subpœnaing witnesses	1
Number of days attending court	6
Number of days making complaints for prosecution	2
Number of days in special work	6
Number of days inspecting barns	3
Total number of days	198

Number of cheese factories inspected	11
Number of creameries inspected	20
Number of butter creameries inspected	19
Number of condenseries inspected	5
Number of vinegar manufactories inspected	1
Number of milk cars inspected	43

Number of herds of cattle inspected	26
Number of stables inspected	28
Total	153

Number of cans of milk inspected at creameries	282
Number of cans of milk inspected at condenseries	268
Number of cans of milk inspected at cheese factories	397
Number of cans of milk inspected at butter factories	515
Number of cans of milk inspected on wagons of milk peddlers	1,187
Number of cans of milk inspected on railroad trains	909
Number of cans of milk inspected at railroad stations	1,683
Total cans inspected	5,241

Number of samples of milk delivered to chemist from milk dealers	26
Number of samples of herds' milk delivered to chemist,	24
Number of samples below State standard	20

Vinegar inspection:

Number of barrels of vinegar inspected	379
Number of samples of vinegar delivered to chemist	7
Number of complaints of vinegar adulteration made	6

REPORT OF ROMAINE A. FRENCH.

Number of days inspecting milk	183
Number of days inspecting butter	4
Number of days inspecting vinegar	10
Number of days taking samples of milk of herds	26

Number of days attending court	5
Number of days on special work	3
Total number of days	231

Number of cheese factories inspected	51
Number of creameries inspected	12
Number of butter creameries inspected	24
Number of condenseries inspected	1
Number of milk stations inspected	17
Number of milk cars inspected	13
Number of Schweitzer cheese factories inspected	4
Number of Italian cheese factories inspected	1
Number of herds of cattle inspected	19
Number of stables inspected	20
Total	162

Number of cans of milk inspected at creameries	337
Number of cans of milk inspected at condenseries	22
Number of cans of milk inspected at cheese factories	1,339
Number of cans of milk inspected at butter creameries,	842
Number of cans of milk inspected on wagons of milk peddlers	530
Number of cans of milk inspected on milk cars	473
Total cans inspected	3,543

Number of samples of milk taken from milk dealers	21
Number of herd samples taken	13
Number of complaints of milk adulteration made	7

REPORT OF LEON D. SPINK.

Report of Leon D. Spink, for a period from April 15, 1899, to September 30, 1899:

Number of days inspecting milk	88
Number of days in taking samples of milk of herds	23
Number of days on special work	1
Total number of days	112

Number of cheese factories inspected	56
Number of creameries inspected	13
Number of condenseries inspected	1
Number of butter creameries inspected	10
Number of milk cars inspected	3
Number of milk stations inspected	17
Number of stables inspected	16
Total	116

Number of cans of milk inspected at creameries	197
Number of cans of milk inspected at condenseries	36
Number of cans of milk inspected at cheese factories	1,233
Number of cans of milk inspected at butter creameries	564
Number of cans of milk inspected at railroad stations	208
Number of cans of milk inspected on wagons of milk peddlers	146
Total cans inspected	2,384

Number of samples of milk taken for analysis	17
Number of herd samples taken for analysis	16
Number of complaints of milk adulteration made	7

REPORT OF M. T. CAIN.

Report of M. T. Cain, agent under bob-veal act for period from October 1, 1898, to June 1, 1899, and from September 1, 1899, to October 1, 1899, is as follows:

Number of days spent inspecting shipments of veal.....	78
Number of days spent visiting points of shipment, ascertaining names and addresses of shippers, and acquainting agents and shippers with requirements of the law, distributing copies of the law, etc.....	41
Number of days spent assisting agents of division in inspecting and testing milk, taking herd samples, etc....	27
Number of days inspecting returned milk cans at different milk stations.....	8
Total number of days.....	154

The following is a statement of all actions pending and brought during the year on account of violations of the Agricultural Department:

Prosecutions.

MILK.

CASE No. 3460.

Sample taken October 3, 1896, by C. J. Morgenstern.

Chemist: F. P. Vandenburg, Buffalo, N. Y.

Attorney: Charles D. Newton, Geneseo, N. Y.

Action brought November 13, 1896, and answer interposed November 25, 1896. Action brought on for trial, February 5, 1897, and on trial motion was made to dismiss complaint on ground that it did not state facts sufficient to constitute a cause of action. Motion granted; appeal taken to Appellate Division of Supreme Court and new trial ordered. Action again brought on

for trial in May, 1899. Defendant did not appear and plaintiff took judgment by default for $100 penalty and costs. Penalty unpaid.

CASE No. 4727.

Sample taken June 11, 1898, by R. A. French.
Chemist: Hugh C. Troy, Ithaca, N. Y.
Attorney: A. C. McCall, Arcade, N. Y.
Action brought and answer interposed.
Disposition: Settled on payment by defendant of $51.98.

CASE No. 4772.

Sample taken September 28, 1897, by C. J. Morgenstern.
Chemist: Hugh C. Troy.
Attorney: Milo M. Acker, Hornellsville, N. Y.
Disposition: Case settled on payment by defendant of $30 and costs.

CASE No. 4770.

Sample taken by C. J. Morgenstern, October 21, 1897.
Chemist: John A. Miller, Buffalo, N. Y.
Attorneys: A. J. & J. Knight, Arcade, N. Y.
Disposition: Case settled on payment by defendant of $30.

CASE No. 4780.

Sample taken by C. J. Morganstern, November, 1897.
Chemist: F. P. Vandenburg, Buffalo, N. Y.

Attorneys: A. J. & J. Knight, Arcade, N. Y.

Action brought and answer interposed; trial resulted in verdict of no cause for action.

CASE No. 4792.

Sample taken May 20, 1898, by R. A. French.

Chemist: Hugh C. Troy.

Attorney: A. C. McCall, Buffalo, N. Y.

Action brought and answer interposed.

Disposition: Action discontinued.

CASES Nos. 4720, 4721.

Samples taken April 30, 1898, by R. A. French and Charles J. Morgenstern.

Chemist: Hugh C. Troy.

Attorneys: Stone & Norton, Attica, N. Y.

Disposition: Case settled on payment by defendant of $50.

CASE No. 4732.

Sample taken June 22, 1898, by R. A. French.

Chemist: Hugh C. Troy.

Attorneys: Stone & Norton, Attica, N. Y.

Disposition: Case settled on payment by defendant of $25.

CASE No. 6740.

Sample taken August 5, 1898, by C. J. Morgenstern and R. A. French.

Chemist: Hugh C. Troy.

Attorney: A. C. McCall, Arcade, N. Y.

Action brought.

Disposition: Case settled on payment by defendant of $53.16.

CASE No. 6731.

Sample taken July 26, 1898, by R. A. French and C. J. Morganstern.

Chemist: Hugh C. Troy.

Attorney: W. F. McNamara, Corning, N. Y.

Disposition: Case settled on payment by defendant of $70.

CASE No. 7154.

Sample taken September 14, 1898, by R. A. French.

Chemist: Hugh C. Troy.

Attorney: Milo M. Acker, Hornellsville, N. Y.

Disposition: Case settled on payment by defendant of $25.

CASE No. 7174.

Sample taken October 26, 1898, by C. J. Morgernstern.

Chemist: Hugh C. Troy.

Attorney: Milo M. Acker, Hornellsville, N. Y.

Disposition: Case settled on payment by defendant of $30 and costs.

CASE No. 7195.

Sample taken October 13, 1898, by R. A. French.

Chemist: Hugh C. Troy.

Attorney: Oscar A. Fuller, Wellsville, N. Y.

Disposition: Case settled on payment by defendant of $50 and costs.

CASE No. 7171.

Sample taken October 13, 1898, by C. J. Morgenstern.

Chemist: Hugh C. Troy.

Attorney: J. A. Le Seur, Batavia, N. Y.

Action brought.

Disposition: Case settled on payment by defendant of $25 and costs.

CASE No. 6735.

Sample taken July 30, 1898, by R. A. French and C. J. Morgenstern.

Chemist: Hugh C. Troy.

Attorneys: Stone & Norton, Attica, N. Y.

Disposition: Case settled on payment by defendant of $50.

CASE No. 8053.

Sample taken July 14, 1899, by Leon D. Spink and R. A. French.

Chemist: Hugh C. Troy.

Attorney: W. W. Clark, Wayland, N. Y.

Disposition: Case settled on payment by defendant of $70.

CASE No. 8057.

Sample taken July 12, 1899, by Leon D. Spink.

Chemist: Hugh C. Troy.

Attorneys: A. J. & J. Knight, Arcade, N. Y.

Disposition: Case settled on payment by defendant of $25 and costs.

CASE No. 8055.

Sample taken July 19, 1899, by R. A. French and Leon D. Spink.

Chemist: Hugh C. Troy.

Attorney: W. W. Clark, Wayland, N. Y.

Disposition: Case settled on payment by defendant of $50 and $20 costs.

CASE No. 6723.

Sample taken July 21, 1898, by C. J. Morgenstern and R. A. French.

Chemist: Hugh C. Troy.

Attorneys: A. J. & J. Knight, Arcade, N. Y.

Disposition: Case settled on payment by defendant of $25 and costs.

CASE No. 7167.

Sample taken September 13, 1898, by C. J. Morgenstern and R. A. French.

Chemist: Hugh C. Troy.

Attorney: Milo M. Acker, Hornellsville, N. Y.

Disposition: Case settled on payment by defendant of $25 and costs.

CASE No. 8076.

Sample taken August 20, 1899, by C. J. Morgenstern.

Chemist: Hugh C. Troy.

Attorneys: A. J. & J. Knight, Arcade, N. Y.

Disposition: Case settled on payment by defendant of $45 and costs.

VINEGAR.

CASE No. 1683.

Sample taken December 7, 1898, by C. J. Morgenstern and R. A. French.

Chemist: Hugh C. Troy.

Attorney: Milo M. Acker, Hornellsville, N. Y.

Disposition: Case settled on payment by defendant of $25 and costs.

CASE No. 1682.

Sample taken December 7, 1898, by C. J. Morgenstern and R. A. French.

Chemist: Hugh C. Troy.

Attorney: Milo M. Acker, Hornellsville, N. Y.

Disposition: Case settled on payment by defendant of $25.

CASE No. 1675.

Sample taken December 7, 1898, by C. J. Morgenstern and R. A. French.

Chemist: Hugh C. Troy.

Attorney: Milo M. Acker, Hornellsville, N. Y.

Disposition: Case settled on payment by defendant of $25 and costs.

CASE No. 1686.

Sample taken December 20, 1898, by C. J. Morgenstern and R. A. French.

Chemist: Hugh C. Troy.

Attorney: Frank Cook, Geneseo, N. Y.

Action brought.

Disposition: Case settled on payment by defendant of $50 and costs.

MILK PROSECUTIONS PENDING.

CASE No. 6696.

Sample taken by M. Galligan and C. J. Standart.

Chemist: John A. Miller, Buffalo, N. Y.

Attorney: James A. Le Seur, Batavia, N. Y.

CASE No. 8071.

Sample taken August 10, 1899, by C. J. Morgenstern.

Chemist: Hugh C. Troy.

Attorney: J. A. Le Seur, Batavia, N. Y.

CASE No. 7196.

Sample taken February 22, 1899, by R. A. French and C. J. Morgenstern.

Chemist: Hugh C. Troy.

Attorney: Charles Knapp, Elmira, N. Y.

CASE No. 7181.

Sample taken March 22, 1899, by C. J. Morgenstern and R. A. French.

Chemist: Hugh C. Troy.

Attorney: Charles Knapp, Elmira, N. Y.

CASE No. 7180.

Sample taken April 25, 1899, by C. J. Morgenstern and M. T. Cain.

Chemist: Hugh C. Troy.

Attorney: W. W. Clark, Wayland, N. Y.

CASE No. 7282.

Sample taken May 16, 1899, by C. J. Morgenstern and M. T. Cain.

Chemist: Hugh C. Troy.

Attorney: A. E. Baxter, Elmira, N. Y.

CASE No. 8051.

Sample taken by L. D. Spink and R. A. French.

Chemist: Hugh C. Troy.

Attorney: W. W. Clark, Wayland, N. Y.

CASE No. 7194.

Sample taken July 13, 1899, by R. A. French.

Chemist: Hugh C. Troy.

Attorney: W. W. Clark, Wayland, N. Y.

CASE No. 8067.

Sample taken July 21, 1899, by C. J. Morgenstern.

Chemist: Hugh C. Troy.

Attorney: W. W. Clark, Wayland, N. Y.

CASE No. 8073.

Sample taken July 26, 1899, by C. J. Morgenstern.

Chemist: Hugh C. Troy.

Attorney: W. W. Clark, Wayland, N. Y.

CASE No. 8059.

Sample taken August 1, 1899, by L. D. Spink.
Chemist: Hugh C. Troy.
Attorney: A. E. Baxter, Elmira, N. Y.

CASE No. 8060.

Sample taken August 24, 1899, by L. D. Spink.
Chemist: Hugh C. Troy.
Attorney: Milo M. Acker, Hornellsville, N. Y.

CASE No. 8061.

Sample taken August 24, 1899, by L. D. Spink.
Chemist: Hugh C. Troy.
Attorney: Milo M. Acker, Hornellsville, N. Y.

CASE No. 8080.

Sample taken August 31, 1899, by C. J. Morgenstern and L. D. Spink.
Chemist: Hugh C. Troy.
Attorney: W. W. Clark, of Wayland, N. Y.

CASE No. 8082.

Sample taken September 1, 1899, by C. J. Morgenstern and L. D. Spink.
Chemist: Hugh C. Troy.
Attorney: W. W. Clark, of Wayland, N. Y.

CASE No. 7199.

Sample taken August 29, 1899, by R. A. French and C. J. Morgenstern.

Chemist: Hugh C. Troy.

Attorneys: A. J. & J. Knight, Arcade, N. Y.

CASE No. 7255.

Sample taken September 1, 1899, by L. D. Spink and C. J. Morgenstern.

Chemist: Hugh C. Troy.

Attorney: Milo M. Acker, Hornellsville, N. Y.

CASE No. 8085.

Sample taken September 13, 1899, by C. J. Morgenstern.

Chemist: Hugh C. Troy.

Attorneys: A. J. & J. Knight, Arcade, N. Y.

CASE No. 7200.

Sample taken September 20, 1899, by R. A. French.

Chemist: Hugh C. Troy.

Attorney: Milo M. Acker, Hornellsville, N. Y.

CASE No. 7186.

Sample taken September 22, 1899, by R. A. French.

Chemist: Hugh C. Troy.

Attorney: Milo M. Acker, Hornellsville, N. Y.

CASE No. 7264.

Sample taken September 28, 1899, by R. A. French.
Chemist: Hugh C. Troy.
Attorney: Milo M. Acker, Hornellsville, N. Y.

CASES Nos. 4723, 4793.

Sample taken June 25, 1898, by C. J. Morgenstern and R. A. French.
Chemist: Hugh C. Troy.
Attorneys: Stone & Norton, Attica, N. Y.

VINEGAR CASES PENDING.

CASE No. 1215.

Sample taken by C. J. Morgenstern.
Chemist: F. P. Vandenburg.
Attorney: A. E. Baxter, Elmira, N. Y.
Action brought and answer interposed.

CASE No. 1216.

Sample taken by C. J. Morgenstern.
Attorney: A. E. Baxter, Elmira, N. Y.
Action brought and answer interposed.

CASE No. 1220.

Sample taken by C. J. Morgenstern.
Attorney: A. E. Baxter, Elmira, N. Y.
Action brought and answer interposed.

CASE No. 1227.

Sample taken by C. J. Morgenstern.
Attorney: A. E. Baxter, Elmira, N. Y.
Chemist: F. P. Vandenburg.
Action brought and answer interposed.

CASE No. 1690.

Sample taken by R. A. French and C. J. Morgenstern.
Chemist: Hugh C. Troy.
Attorney: A. E. Baxter, Elmira, N. Y.

CASE No. 1697.

Sample taken by C. J. Morgenstern and R. A. French.
Chemist: Hugh C. Troy.
Attorney: A. E. Baxter, Elmira, N. Y.

Respectfully submitted,

VERLETT C. BEEBE,
Assistant Commissioner.

Report of William F. Hughes.

Hon. Charles A. Wieting, *Commissioner of Agriculture:*

Dear Sir.—As Assistant Commissioner for the eighth division, comprising the counties of Cayuga, Monroe, Ontario, Seneca, Wayne and Yates, I have the honor to submit the following report of the work performed under my direction during the year ending September 30, 1899:

Heretofore the work of the Department in this division has consisted, to a very large extent, in the examination of milk offered for sale in the city of Rochester, and in other large towns which are dependent upon outside sources for their supply. Chemical examinations of samples taken three years ago demonstrated that a considerable proportion of the milk consumed here was either adulterated or below the legal standard in nutritious properties, and a series of vigorous prosecutions was instituted. Convictions were obtained in nearly all cases, the result of which has been to inspire dealers with a wholesome respect for the law. Proof of this is to be found in the fact that samples of milk taken within the last year in all parts of the division have been of much higher average quality than those formerly procured, while the finding of a sample which fails at least to meet the legal requirements is now an extraordinary, instead of a frequent, incident of the work of the inspectors.

The milk supply is not only of a higher degree of purity than formerly, but a further fact upon which the consumers are to be congratulated, is, that milk preservatives have been but little used in this division. Agencies have been established here for the sale of articles designed to preserve the freshness in taste and appearance of milk several days old, but the reports of the

chemist upon many tests to discover the presence of these drugs show that the dairymen of the division have not found it necessary or profitable to employ the "Embalming" process. One reason for this, doubtless, is the fact that the milk produced here is transmitted, within a few hours, from the dairy to the consumer, rendering superfluous any but the ordinary precautions to keep it in fit condition for use.

With a pure supply of milk available in its natural state, obviously the most important work that can be done by this Department is to see to it that this milk reaches the consumer in wholesome condition and free from the germs of disease. To this end the efforts of the inspectors have been largely directed during the last year, and the outcome of the Department's dealings with the worst offenders has been such a renovation and remodeling of filthy and unsanitary cow stables as promises great results for the health of the community.

With respect to other subjects than the milk supply, the work of the Department has been prosecuted vigorously, but, as usual in this division, with less conspicuous results. The butter and cheese sold here have been of good quality, and the inspectors have been unable to procure a single sample of oleomargarine. No agency for the sale of this substitute for butter exists in this division, and there is a healthy public sentiment in opposition to the sale and use of such article.

Particular attention has been paid to the enforcement of the provisions of chapter 491 of the Laws of 1898, regulating the sale and shipment of calves and veal. As soon as printed copies of the statute were obtained from the Department they were distributed systematically among dealers, shippers, expresss agents and other persons interested, with a view to giving the widest possible publicity to the requirements of the law. Upon the appointment of John W. Smith, 2d, as an inspector of the Department, he was assigned to special work in connection with the enforcement of this law. A large number of carcasses of calves

were examined in the hands of producers and dealers, and at freight-houses awaiting shipment. It was found that there was a general inclination on the part of the shippers and representatives of the express companies to assist the Department in this work, and not a single instance was discovered in which prosecution would have been justified.

There are numerous vinegar factories in this division, the processes and products of which are constantly under the supervision of the Department. Frequent examinations are made at the factories and at freight-houses, as well as in groceries where vinegar is sold at retail. The product of the factories is generally of a high class, but in a few cases samples have been found on sale by retailers below the legal standard and prosecutions have been instituted.

The agents of the Department assigned by you to work in this division have performed their duties intelligently and faithfully.

A summary of the inspections made during the year, together with detailed reports of the prosecutions instituted and the results obtained, will be found below:

REPORT OF GEORGE BERNHARD.

Number cans milk examined	10,683
Number barrels vinegar examined	220
Number packages butter examined	940
Number cans milk tested	2,667
Number barrels vinegar tested	97
Number samples milk taken for Babcock test	353
Number samples vinegar taken	1
Number samples butter taken	2

REPORT OF JAMES E. LANGDON.

Number cans milk examined	13,478
Number barrels vinegar examined	260
Number packages butter examined	921
Number cans milk tested	3,087
Number barrels vinegar tested	128
Number samples milk taken for Babcock test	609
Number samples butter taken	1

REPORT OF JOSEPH M. QUIGLEY.

Number cans milk examined	8,733
Number barrels vinegar examined	431
Number packages butter examined	2,055
Number cans milk tested	1,934
Number barrels vinegar tested	157
Number samples milk taken for Babcock test	356
Number samples vinegar taken	2
Number samples butter taken	6

Prosecutions.

MILK.

CASE No. 5684.

Civil action. Settled by attorney for the People, defendant paying penalty of $25.

Witnesses: George Bernhard, Joseph M. Quigley.

Chemist: F. P. Vandenbergh.

Attorney: J. B. M. Stephens.

CASE No. 5687.

Criminal action; jury trial; defendant acquitted.
Witnesses: James E. Langdon, George Bernhard.
Chemist: Fred R. Eilinger.
Attorney: J. B. M. Stephens.

CASE No. 5712.

Criminal action; defendant found guilty and fined $25.
Witnesses: James E. Langdon, Joseph M. Quigley.
Chemist: Samuel A. Lattimore.
Attorney: J. M. E. O'Grady.

CASE No. 5727.

Case discontinued.
Witnesses: George Bernhard, James E. Langdon.
Chemist: Samuel A. Lattimore.
Attorney: W. W. Armstrong.

CASE No. 5729.

Civil action; settled by attorney for the People, defendant paying penalty of $25.
Witnesses: James E. Langdon, George Bernhard.
Chemist: Samuel A. Lattimore.
Attorney: W. W. Armstrong.

CASE No. 5736.

Civil action; settled by attorney for the People, defendant paying penalty of $26.

Witnesses: James E. Langdon, Joseph M. Quigley.

Chemist: Samuel A. Lattimore.

Attorney: W. W. Armstrong.

CASE No. 8414.

Civil action; settled by attorney for the People, defendant paying penalty of $50.

Witnesses: James E. Langdon, George Bernhard.

Chemist: Samuel A. Lattimore.

Attorney: Spencer F. Lincoln.

CASE No. 8418.

Civil action; settled by attorney for the People, defendant paying costs, $10.

Witnesses: James E. Langdon, Joseph M. Quigley.

Chemist: Samuel A. Lattimore.

Attorney: W. T. Plumb.

CASE No. 8415.

Civil action; settled by attorney for the People, defendant paying penalty of $50.

Witnesses: James E. Langdon, George Bernhard.

Chemist: Samuel A. Lattimore.

Attorney: Spencer F. Lincoln.

CASE No. 8405.

Civil action; settled by attorney for the People, defendant paying penalty of $25.

Witnesses: Joseph M. Quigley, James E. Langdon.

Chemist: Samuel A. Lattimore.

Attorney: W. T. Plumb.

CASE No. 8442.

Civil action; settled by attorney for the People, defendant paying penalty of $25.

Witnesses: James E. Langdon, George Bernhard.

Chemist: Samuel A. Lattimore.

Attorney: George D. Williams.

VINEGAR.

CASE No. 1589.

Civil action; settled by attorney for the People, defendant paying penalty of $25.

Witnesses: Joseph M. Quigley, John W. Smith.

Chemist: Samuel A. Lattimore.

Attorney: W. W. Armstrong.

UNSANITARY COW STABLES.

CASE No. 11.

Criminal action; Justice Court, Irondequoit; case tried before Judge Buyck.

Defendant found guilty and fined $25.

Witnesses: Joseph M. Quigley, Dr. C. H. Cook.

Attorney: W. W. Armstrong.

CASE No. 16.

Civil action; Municipal Court, Rochester; case tried before Judge White.

Judgment given for $50 and costs.
Witnesses: Joseph M. Quigley, Dr. C. H. Cook.
Attorney: W. W. Armstrong.

CASES PENDING.

MILK.

CASE No. 5705.

Witnesses: James E. Langdon, George Bernhard.
Chemist: Fred R. Eilinger.
Attorney: A. H. Searing.

CASE No. 5709.

Witnesses: James M. Quigley, George Bernhard.
Chemist: Samuel A. Lattimore.
Attorney: Francis C. Allen.

CASE No. 8422.

Witnesses: Joseph M. Quigley, George Bernhard, James E. Langdon.
Chemist: Samuel A. Lattimore.
Attorney: Charles D. Newton.

CASE No. 8437.

Witnesses: George Bernhard, Joseph M. Quigley, James E. Langdon.
Chemist: Samuel A. Lattimore.
Attorney: Charles D. Newton.

CASE No. 8463.

Witnesses: George Bernhard, James E. Langdon.
Chemist: Samuel A. Lattimore.
Attorney: John F. Kingston.

CASE No. 8450.

Witnesses: Joseph M. Quigley, B. Copley.
Chemist: Samuel A. Lattimore.
Attorney: Francis C. Allen.

CASE No. 8469.

Witnesses: Joseph M. Quigley, George Bernhard.
Chemist: Samuel A. Lattimore.
Attorney: J. B. M. Stephens.

CASE No. 8472.

Witnesses: Joseph M. Quigley, George Bernhard.
Chemist: Samuel A. Lattimore.
Attorney: J. B. M. Stephens.

CASE No. 8491.

Witnesses: Joseph M. Quigley, James E. Langdon.
Chemist: Samuel A. Lattimore.
Attorney: Erwin S. Plumb.

CASE No. 8492.

Witnesses: James E. Langdon, George Bernhard.
Chemist: Samuel A. Lattimore.
Attorney: Erwin S. Plumb.

CASE No. 8480.

Witnesses: George Bernhard, W. E. Hall.
Chemist: Samuel A. Lattimore.
Attorney: Anson S. Wood.

CASE No. 8484.

Witnesses: George Bernhard, W. E. Hall.
Chemist: Samuel A. Lattimore.
Attorney: Anson S. Wood.

CASE No. 8493.

Witnesses: James E. Langdon, George Bernhard.
Chemist: Samuel A. Lattimore.
Attorney: Horace A. McGuire.

CASE No. 8494.

Witnesses: James E. Langdon, Joseph M. Quigley.
Chemist: Samuel A. Lattimore.
Attorney: W. T. Plumb.

CASE No. 8489.

Witnesses: George Bernhard, James E. Langdon.
Chemist: Fred R. Eilinger.
Attorney: Anson S. Wood.

CASE No. 9004.

Witnesses: George Bernhard, James E. Langdon.
Chemist: Fred R. Eilinger.
Attorney: Anson S. Wood.

CASE No. 9005.

Witnesses: George Bernhard, James E. Langdon.
Chemist: Fred R. Eilinger.
Attorney: Anson S. Wood.

CASE No. 9007.

Witnesses: James E. Langdon, George Bernhard.
Chemist: Fred R. Eilinger.
Attorney: Anson S. Wood.

CASE No. 9008.

Witnesses: George Bernhard, James E. Langdon.
Chemist: Fred R. Eilinger.
Attorney: Spencer F. Lincoln.

CASE No. 9010.

Witnesses: George Bernhard, James E. Langdon.
Chemist: Fred R. Eilinger.
Attorney: Spencer F. Lincoln.

VINEGAR.

CASE No. 1582.

Witnesses: George Bernhard, James E. Langdon.
Chemist: Samuel A. Lattimore.
Attorney: E. M. McGonigal.

CASE No. 1588.

Witnesses: Joseph M. Quigley, John W. Smith.
Chemist: Samuel A. Lattimore.
Attorney: Notice of designation not yet received.

UNSANITARY COW STABLES.

CASE No. 8.

Witnesses: Joseph M. Quigley, Dr. C. H. Cook.
Attorney: J. M. E. O'Grady.

CASE No. 9.

Witnesses: Joseph M. Quigley, Dr. C. H. Cook.
Attorney: J. M. E. O'Grady.

CASE No. 17.

Witnesses: Joseph M. Quigley, Dr. C. H. Cook.
Attorney: W. T. Plumb.

CASE No. 18.

Witnesses: Joseph M. Quigley, Dr. C. H. Cook.
Attorney: George D. Williams.

MILK SUPPLY OF ROCHESTER.

		Gallons.
Shipped in via	N. Y. C. & W. S. R. R.	1,022,000
"	Erie R. R.	412,800
"	B., R. & P. R. R.	22,607
"	L. V. R. R.	53,290

	Gallons.
Shipped in via R., W. & O. R. R.	5,840
Brought in on wagons (estimated)	3,680,800
Produced from cows in city (estimated)	478,000
Cream received over railroads and on wagons	81,342
Total milk and cream from all sources	5,756,679
Increase over 1898, in gallons	210,994

Very respectfully yours,

WM. T. HUGHES,

Assistant Commissioner.

Report of Asa L. Twichell.

Hon. Charles A. Wieting, *Commissioner of Agriculture:*

Dear Sir.— I have the honor and pleasure to submit to you this my fourth annual report of the work performed in this division, comprising Orleans, Niagara and Erie counties, for the year ending September 30, 1899. The work has been vigorously prosecuted during the entire year and I believe that we are all becoming more proficient in detecting violations of the agricultural laws.

It has been the aim in this division to carefully investigate all cases and, if possible, prosecute the man who willfully violates the law rather than to make a large number of cases. Especially is this true in regard to many milk peddlers in Buffalo, who receive milk which has been adulterated by the producers before shipment.

OLEOMARGARINE.

During the first months of the year the price of butter was so low that there was little temptation to use the counterfeit, but as winter came on the price of butter advanced and a few were tempted by some slick-tongued agents and used it in their boarding-houses and restaurants. In the early part of January, Agents W. C. Patrick and John McGuire, of the first division, who are experts on oleomargarine, were sent here and with their help we were able to find several of the cheaper class of restaurants and boarding-houses where it was being used, and samples were taken in each case and prosecution commenced. We found that

Armour & Co. had an agent or agents at work here taking orders and it was shipped direct from the parent house at Hammond, Indiana. We also found it very difficult to locate these parties, as they had given different names and addresses to nearly every customer. The Attorney-General was asked for an attorney to prosecute John Doe, so that if the parties were found they could be dealt with at once, and Hugo S. Kiene was appointed counsel. After watching very closely for a few days one of the parties was located. A warrant was issued by Judge Thomas S. King and defendant was fined twenty-five ($25) dollars.

We also found that H. C. Bangert, who keeps a stall on Clinton Street Market, had been taking orders, and that he had a man working for him taking orders, on which he received a commission. Action was begun in Supreme Court against Bangert, and he paid a penalty of two hundred ($200) dollars. The man working for him was arrested and Police Justice Thomas S. King fined him fifty ($50) dollars.

Prosecutions.

Thirteen samples were taken and have been disposed of in the following manner:

No. 1558.

Sample taken by Agents Wm. B. Reading, John R. Earl and C. A. Warren.

Wesley C. Dudley, counsel.

Action begun in Supreme Court and case settled by counsel on payment of $25 penalty and costs of action.

No. 1566.

Sample taken by Agents Wm. B. Reading and W. C. Patrick.

Wesley C. Dudley, counsel.

Action begun in Supreme Court and action settled by counsel on payment of $25 penalty and costs of action.

No. 1562.

Sample taken by Agents Wm. B. Reading, W. C. Patrick and M. Galligan.

Wesley C. Dudley, counsel.

Action begun in Supreme Court and counsel settled case on payment of $25 penalty and costs of action.

No. 1561.

Samples taken by Agents Wm. B. Reading and W. C. Patrick.

Wesley C. Dudley, counsel.

Action begun in Supreme Court and settled by counsel on on payment of $25 penalty and costs of action.

No. 1557.

Sample taken by Agents M. Galligan and John McGuire.

Wesley C. Dudley, counsel.

Action begun in Supreme Court and settled by counsel on payment of $25 and costs of action.

No. 1560.

Sample taken by Agents Wm. B. Reading, W. C. Patrick and C. A. Warren.

Wesley C. Dudley, counsel.

Action begun in Supreme Court and case settled by counsel on on payment of $25 penalty and costs of action.

No. 1465.

Sample taken by Agents M. Galligan and John R. Earl.

Wesley C. Dudley, counsel.

Action begun in Supreme Court and is now pending.

No. 1563.

Samples taken by Agents Wm. B. Reading and W. C. Patrick.
Wesley C. Dudley, counsel.
Action begun in Supreme Court and is now pending.

No. 1603.

Samples taken by Agents M. Galligan and John McGuire.
Wesley C. Dudley, counsel.
Pending.

No. 1464.

Samples taken by Agents M. Galligan and John McGuire.
Wesley C. Dudley, counsel.
Action begun in Supreme Court and is now pending.

No. 1599.

Sample taken by Agents J. R. Earl, M. Galligan and John McGuire.

Nathaniel W. Norton, counsel.

Action begun in Supreme Court, May 1, 1899; settled before answer on payment of $41 to counsel.

No. 1467.

Sample taken by Agents C. A. Warren and John R. Earl.

Nathaniel W. Norton, counsel.

Action begun in Supreme Court, May 5, 1899, and settled before answer for $41 paid to counsel.

No. 1598.

Sample taken by Agents M. Galligan and C. G. Standart.

Nathaniel W. Norton, counsel.

Action begun in Supreme Court, May 4, 1899; settled before answer, May 27, 1899, by payment of $41 to counsel.

All cases which have been settled or compromised by counsel for less than full payment are cases where a judgment against the offender would be worthless, and for the further reason that in several cases we caught them with the first they ever had.

VINEGAR.

We have kept a constant watch for adulteration in this article, but have found very little that was not standard, and I believe that most of the manufacturers are improving the quality of their product, and that very few of them are sending out colored vinegar for pure cider vinegar. But on investigation I am led to believe that some manufacturers are making a vinegar and putting it on the market for pure cider vinegar which is not as represented, and they are making it in such a way that it is very hard for a chemist to detect it. A thorough research should be made by our chemists to see if it can be detected. It has been our constant aim in taking samples of vinegar which were adulterated, to take them so that they would strike home to the manufacturer, and this has been done, as in two cases they have settled, although in one case the sample was not taken direct from them.

Prosecutions.

No. 2229.

Sample taken by Agents C. J. Standart and M. Galligan.

Nathaniel W. Norton, counsel.

Action begun in Supreme Court, May 4, 1899, and is still pending.

No. 2253.

Sample taken by Agents Standart and Galligan.

Nathaniel W. Norton, counsel.

Action begun in Supreme Court, May 4, 1899; case settled for $75 in full of penalty and costs.

No. 2355.

Sample taken by Agents A. S. Delano and C. A. Warren.

George W. Knox, counsel.

Settled on payment of penalty of $25.

DISEASES OF DOMESTIC ANIMALS.

There had been no contagious diseases among our domestic animals calling for a State veterinarian until an outbreak of rabies last July, or, at least, that was the first time it came to my attention. We found, however, on investigation, that there had been isolated cases in Buffalo extending back to December, 1898, but how it was brought here we were unable to find out.

Dr. John Wende says that in December, 1898, an old couple brought a pet dog to his place, which he pronounced sick with rabies and he killed at once. About a month later he was called to treat a cow, which afterward died of the same disease. He was not able to tell when they had been bitten.

Dr. W. L. Baker, veterinarian, says that last March a man, whose name he did not wish to give, came to him with a finely-bred dog and requested treatment for him. At the same time he said that the dog had always been of a quiet disposition; never fighting other dogs until within the last two days, when he had pitched upon and bitten every dog he had come in contact with. The doctor diagnosed the case as rabies, isolated it, and the dog died with the disease in a few days. The owners of the dog notified all parties whose dogs they knew had been bitten, and most of these were killed.

The first case which came to my attention was on July 22, when I saw a notice in the paper that a mad dog had bitten three persons in the towns of Lancaster and Alden. I requested Agent William B. Reading to go there and find out all the facts in the case. He reported that on the 21st day of July a large St. Bernard dog, belonging to a Mr. Cook, of Alden village, left home, went through the village of Alden and on to Sand Ridge, and from there to Wende, where he bit one John Getz and a horse and cow belonging to James Vine. He was traced from there to Looneyville, where he bit a horse belonging to Henry Erbs, and also a boy by the name of Siehl. From there he went to the Winspier road, where he bit a Walters boy. The dog also chased some cattle belonging to John Amburst on what is known as the Dutch road, in the town of Lancaster, and two of them developed rabies and were killed by Dr. Hausser, V. S., on August 11. Later on it developed that a horse and cow belonging to Mr. Fred Vine, at Wende, must have been bitten by this dog on the night of July 21st, for on the morning of the 22d Mr. Vine noticed marks on the noses of a horse and cow belonging to him as though the animals had been bitten. This farm was in the direct path of the dog. Fred Vine's horse died with symptoms of rabies August 22d. The horse belonging to Henry Erbs and the cow and horse belonging to James Vine have not yet shown symptoms of the disease. The dog went from Wende back to Looneyville, where he was shot Sunday morning, July 23d, after having wandered around two nights and one day and covering a section seven miles long. Dr. John Wende, V. S., wired Dr. Kelly, V. S. at Albany, and he came on and investigated the case. He took parts of the brain of suspected dogs and inoculated several rabbits, which developed rabies, proving beyond a doubt that we had rabies here.

Dr. Kelly returned here August 2d, and we investigated the reports of rabid dogs in the towns of Lancaster and Marilla. In the town of Lancaster we found a heifer suffering with symptoms of rabies, and she died after being sick three or four days.

At Marilla we found that a strange dog came into the yard of Mr. LaSalle Tabor on July 2d, and laid down under a tree. Mr. Tabor thought the dog acted strangely and took a pitchfork to drive him away. The dog then ran into a barn where there were two calves, and Mr. Tabor saw him bite one of them. Mr. Tabor then aroused the neighbors with the cry of "Mad dog!" and they gave chase and shot the dog about half a mile from there. The calf which Mr. Tabor saw the dog bite was taken sick nine days afterward, having fits, bellowing, etc., and died after being sick six days. The other calf was taken sick after fifteen days, with same symptoms, and died after being sick two days. Mr. Tabor said both of the calves might have been bitten, for the dog got out into the yard and was out of his sight for a moment.

I had also had reports of rabid dogs in the towns of East Aurora and Wales. These facts were presented to you and it was thought best, in order to stop the spread of the disease, to quarantine the towns of Alden and Marilla and parts of Lancaster, East Aurora, Wales and Elma. This you did on August 3d, sending us notices, which were posted throughout that section.

On August 7th, Otto Tressler, an eight-year-old boy, living in the village of Sloan, just outside of Buffalo, died of hydrophobia. We investigated this case, and found that he was bitten on May 15th last by a dog owned in the village and which was thought to be vicious. Mr. Thomas Barry, who came to the boy's rescue, was also bitten. The dog was killed immediately afterward. When the boy died Mr. Barry began to fear that he was in danger himself and went to the Pasteur Institute in New York for treatment. It was too late, however, the poison having worked in his system too long. He died there on the 27th day of August, after suffering great pain for three days, the last two of which he had to be strapped to his bed.

In the village of Wales Hollow, about twenty-two miles from Buffalo, a strange dog was seen snapping and snarling at every-

thing he came near, and having a jaded and starved appearance. He was shot, and it was noticed that he wore a Buffalo tag. On investigating it was found that he left Buffalo the day before. The chairman of the board of health of the town was there when he was shot and opened the dog, finding his stomach filled with bark, grass, etc., which he had snapped up as he ran along.

In the village of Middletown, in Niagara county, about twenty miles from Buffalo, on August 24th, a strange dog, upon which was a Buffalo tag, appeared snapping and snarling at nearly everything he could get at, but was so weak he could hardly move and was promptly shot. The tag was No. 3556, and on searching the records in Buffalo we found that the dog was owned at No. 1212 Clinton street in that city. The owner was seen and he said the dog left home on August 21st, but had been sick two or three days before leaving. So it seems that this dog had been wandering around for three days. How many dogs and other animals he had bitten in that time we cannot tell.

Several consultations with Mayor Diehl and Health Officer Dr. Ernest Wende, of Buffalo, were had, who requested this Department to quarantine that city, as it would help them to stamp out the disease. They said an order would be issued by the board of health forbidding any dogs to run at large in the city. This was done. You were advised of all the facts and consulted with in regard to the condition here and you deemed that necessity demanded the quarantine of all Erie county. This you did on September 20th, sending us notices which were posted in all the towns of Erie county and in the wards in the city of Buffalo.

A little later we found that the disease had taken a strong hold in the town of Pendleton, town and city of Lockport, and by request of the health authorities there, and upon the reports of the agents of the Department here, you thought best to quarantine those places. This you did on September 28th, sending us notices which we posted as in the other cases.

The time of quarantine was sixty days in each case.

I will not enumerate all the cases which came to our attention for it would fill a large sized book were I to do so. But I will say that cases of rabid dogs in sixteen towns in Erie county and many in the city of Buffalo were investigated. The people on the routes traveled by suspected animals were urged to take care of their own, and where dogs were known to have been bitten their owners were requested to kill them. This request was willingly complied with in most cases. I will cite two more cases to show how important it is to take vigorous and immediate action in cases of rabid dogs.

At about 7 o'clock in the morning of September 2d, a dog left his home in the town of Clarence, and between that time and noon traveled nearly twenty miles and bit over twenty dogs on the way.

On September 1st, a dog belonging to S. J. Merritt, in the town of Newstead, left home about 10 a. m., went south through the town of Alden, then into Lancaster where he was shot about the middle of the forenoon, having traveled nearly fifteen miles and known to have bitten five dogs en route.

SYNOPSIS OF RESULT OF RABIES IN THIS SECTION.

Two lives lost as previously mentioned in this report.

Seventeen persons sent to Pasteur Institute, New York, at expense of Erie county, and several at their own expense.

Loss of six head of cattle in town of Lancaster.

Loss of three head of cattle in town of Marilla.

Loss of one cow and one horse in town of Cheektowaga.

Loss of one cow in town of Concord.

Loss of two cows in city of Buffalo.

Loss of one horse in town of Alden.

The foregoing was the loss in Erie county. In Niagara county the loss was eight head of cattle, one horse and several hogs.

We have tried in all cases to work with the local boards of health in the different towns and cities, and in nearly all places they have taken vigorous action. In some villages they have hired

men to shoot all dogs that were running at large unmuzzled. Especially has the shot-gun policy been in force in Springville and Hamburgh.

It has taken considerable time of all in this division to look after the work connected with this outbreak. Many times it has been a puzzling question to know what was best to do. I believe that we have the upper hand of it now and am in hopes we will have no more serious trouble.

I would urge the amendment of the law so that when a district is quarantined against rabies any person who violates it can be arrested and taken before a justice at once, for it is something that needs quick action and we should not have to wait for the slow process of the Supreme Court.

MILK.

As in the years before, looking after producers and handlers of milk has taken more of our time than the work in any other line.

I believe this work of great importance as the quality of milk used has more direct influence upon the public health than any other article of food.

We have tried to visit all cheese factories and creameries at least once during the year and some of them three or four times. We not only look for adulterations, but urge upon the proprietors and patrons the importance of cleanliness in all operations connected with the handling of milk.

In Buffalo, where a large part of the milk produced in this division is used, we have a regular system of inspection at the stations, and when we find any one shipping milk which is wrong we go at once to the place from which it is shipped, and if then found wrong there a sample is taken.

The milk for Buffalo is handled differently than in the eastern part of the State for the New York trade. Each peddler here makes a contract with some individual producer for so many cans of milk per day for a year. The time on nearly all contracts ex-

piring May 1st of each year. I have found that many farmers do not take pains enough to find out about the responsibility of the people to whom they ship and consequently their losses are heavy each year.

The method of taking samples of milk at the station in Buffalo, testing it with the lactometer and Babcock test, and afterward testing the same milk when the peddler is selling it on the street, gives us a clear idea as to which ones are selling it just as received.

The amount of milk consumed does not vary much from last year; in fact there has been a slight decrease on some roads, but a gain on others, so that taken altogether there is a slight increase.

There have been nearly one and one-half million dollars, at an average price of eight and one-half cents per gallon, paid to the farmers in the counties in this division for milk to be sold in the cities of Lockport, Niagara Falls, Tonawanda and Buffalo, besides quite a large amount for cream of which we cannot give an accurate account.

Buffalo received its supply from the following sources:

	Gallons.
Drawn in with teams from the section immediately surrounding Buffalo (estimated)	3,212,000
West Shore R. R.	98,194
New York Central R. R.	566,542
Delaware, Lackwanna & Western R. R.	901,300
Lake Shore R. R.	1,496
Lehigh Valley R. R.	289,230
Buffalo, Rochester & Pittsburgh R. R.	781,466
Western New York & Pennsylvania R. R.	1,998,888
Erie and branches (estimated)	2,290,000
Express (estimated)	100,000
Total	10,139,116

The amount of milk credited to the Erie is estimated by counting the cans received on different days, as they did not wish to give the figures from their books.

I still find the law requiring us to take samples of milk from herds under certain conditions to be one of justice to all, and it makes it so that the person caught can have no reason for saying that he has not been fairly dealt with.

I fell that I cannot recommend too strongly the passage of a law stopping the sale of skim milk and whole milk from the same wagon, in all cities, for when they have both, after the inspectors have examined the milk once, the temptation is great to mix them together, thinking they will not be held up again that morning. I will mention one such case that came under my own observation. One morning while out in the tenement district inspecting milk, we tested some belonging to a man who had only two cans, one each of skim and whole milk. The can of skim milk was marked with a large placard, so large in fact that it excited my suspicion. We let the man drive on and I took pains to follow and watch him from a distance. I saw him stop, stand still in his wagon a moment, look around to see if any one was watching, and then fill his small hand can from both the skim and whole milk cans and quickly disappear in the building. Nearly all the people who are imposed upon in this way are poor and should be protected. The man above mentioned has paid two penalties, but I do not believe his lesson severe enough yet.

When testing milk, if we find a suspicious lactometer standing, or it appears that an official sample ought to be taken, we usually take an extra sample for Babcock tests and apply Dr. Babcock's formula for obtaining the per cent. of solids. In many cases we find the result almost the same as the chemist's analysis. I find this work to be one of great benefit to all. It is a great educator.

There is but one cheese factory in this division paying for their milk by the Babcock test and that is giving good satisfaction. I believe that is the way all milk ought to be paid for. Proprietors

of other factories have tried it but for some reason it has been discarded. I think mostly on account of the extra amount of work and dissatisfaction from having it done by inexperienced hands.

The number of milk cases for the past year is fifty-three. Classified as follows:

Peddlers	40
Peddlers and producers	5
Shippers	4
Patrons of cheese factories	4
Total	53

Quite a large number of these cases are pending for the reason that we like to wait until winter to try them, when the men are not so busy; also because Mr. Hugo S. Kiene, who was attorney in several of the cases, was sick and away for quite a while, and finally died last July.

Prosecutions.

No. 6130.

Sample taken by agents, C. J. Standart and John J. Coughlin.

Nathaniel W. Norton, counsel.

Action commenced in Supreme Court for penalty and discontinued on payment of forty-five ($45) dollars.

No. 7586.

Sample taken by agents, M. Galligan and C. J. Standart.

Nathaniel W. Norton, counsel.

Action begun in Supreme Court for penalty and discontinued on payment of sixty-six ($66) dollars.

No. 6104.

Sample taken by agents, M. Galligan and C. J. Standart.

Nathaniel W. Norton, counsel.

Action begun in Supreme Court and discontinued on payment of forty-six ($46) dollars.

No. 6103.

Sample taken by agents, John J. Coughlin and C. J. Standart.

Nathaniel W. Norton, counsel.

Action begun in Supreme Court and discontinued on payment of forty-one ($41) dollars.

No. 7577.

Sample taken by agents, C. A. Warren and John R. Earl.

Nathaniel W. Norton, counsel.

Action commenced in Supreme Court and discontinued on payment of forty-six ($46) dollars.

No. 6800.

Sample taken by agents, C. A. Warren and John R. Earl.

Irving L. Hommedien, counsel.

Action begun in Supreme Court. Case settled by defendant paying twenty-five ($25) dollars and costs of action.

No. 6796.

Sample taken by agents, C. A. Warren and John R. Earl.

Irving L. Hommedien, counsel.

Counsel thought that the fat was so high, recovery could not be had and did not bring an action.

No. 6105.

Sample taken by agents, M. Galligan and C. J. Standart.

Wesley C. Dudley, counsel.

Action commenced in Supreme Court and discontinued on payment of twenty-five ($25) dollars and costs by defendant.

No. 7094.

Pending at close of last year. Sample taken by agent, C. J. Standart. Action begun in Supreme Court and discontinued by payment of fifty dollars ($50) and costs.

No. 7242.

Sample taken by agents, C. A. Warren and John R. Earl.

George W. Knox, counsel.

Settled on payment of penalty of twenty-five ($25) dollars.

PENDING.

Nos. 6106, 6123, 6112, 6102, 6599, 7583, 7580, 7589, 7569, 7598, 8182, 8233, 8232, 8234, 8310, 8336, 8214, 8217, 8224, 8344, 8313, 8331, 8335, 6140, 8338, 6144, 6147, 6138, 8242, 8241, 6150, 8320, 8161, 6137, 8226, 8216, 8184, 8153, 8185, 8202, 8318, 8239, 8226, 6141, 8312.

The following cases, which were pending at the close of last year, have been disposed of in the manner indicated below.

No. 7212.

Sample taken by agent, C. J. Standart.

Fred. J. Blackman, counsel, who investigated and thought best not to bring any action.

No. 7095.

Sample taken by agents, John J. Coughlin and M. Galligan.

Wesley C. Dudley, counsel.

Action begun in Supreme Court and discontinued on payment by defendant of fifty ($50) dollars and costs.

No. 7208.

Sample taken by agents, John J. Coughlin and Wm. B. Reading.

Edward R. O'Malley, counsel.

Action begun in Supreme Court and discontinued on payment by defendant of twenty-five ($25) dollars and costs.

No. 7233.

Sample taken by agent, John J. Coughlin.

Fred. J. Blackman, counsel.

Action begun in Supreme Court and discontinued by defendant paying costs.

No. 7078.

Sample taken by agents, C. A. Warren and John R. Earl.

Edward R. O'Malley, counsel.

Action begun in Supreme Court and discontinued on payment by defendant of twenty-five ($25) dollars and costs.

No. 7079.

Sample taken by agents, C. A. Warren and John R. Earl.

Chester W. Chapin, counsel.

Action begun in Supreme Court and discontinued by defendant paying forty ($40) dollars and costs.

No. 7086.

Sample taken by agent, C. J. Standart.

Wesley C. Dudley, counsel.

Action begun in Supreme Court. Judgment taken by default for one hundred ($100) dollars and costs. Execution issued and returned unsatisfied. Defendant arrested, but released on jail limits in Buffalo.

No. 7094.

Sample taken by agent, C. J. Standart.

Wesley C. Dudley, counsel.

Action begun in Supreme Court and discontinued on payment of penalty of fifty ($50) dollars and costs.

No. 7215.

Sample taken by agents, M. Galligan and William B. Reading.

Edward R. O'Malley, counsel.

Action begun in Supreme Court and discontinued on payment by defendant of twenty-five ($25) dollars and costs.

No. 7237.

Sample taken by agents, C. J. Standart and William B. Reading.

Chester W. Chapin, counsel.

Action begun in Supreme Court and discontinued on payment by defendant of $76.15 and costs.

No. 7239.

Sample taken by agent, C. J. Standart.

Fred. J. Blackman, counsel.

Action begun in Supreme Court and discontinued by defendant paying costs.

No. 7203.

Sample taken by agents, C. A. Warren and John R. Earl.

Chester W. Chapin, counsel.

Action begun in Supreme Court and discontinued on payment of fifty ($50) dollars by defendant.

No. 7209.

Sample taken by agents, M. Galligan and William B. Reading.

Edward R. O'Malley, counsel.

Action begun in Supreme Court and discontinued on payment of fifty ($50) dollars' penalty and costs.

No. 7069.

Sample taken by agents, John R. Earl and C. A. Warren.

Wm. H. Vicary, counsel.

Action begun in Supreme Court and discontinued on payment by defendant of fifty-seven ($57) dollars and costs.

No. 7096.

Sample taken by agent, C. J. Standart.

Edward R. O'Malley, counsel.

Action begun in Supreme Court and discontinued on payment of thirty-five ($35) dollars and costs.

No. 7056.

Sample taken by agents, John J. Coughlin and C. J. Standart.

E. O. Farrar, counsel.

Action begun in Supreme Court and settled by defendant paying thirty-five ($35) dollars and costs.

No. 7087.

Sample taken by agents, C. A. Warren and John R. Earl.

William H. Vicary, counsel.

Settled before action by defendant paying twenty-five ($25) dollars.

No. 7058.

Sample taken by agents, John J. Coughlin and C. J. Standart.

E. O. Farrar, counsel.

Action commenced in Supreme Court and discontinued on payment by defendant of fifty-five ($55) dollars and costs.

No. 7092.

Sample taken by agent, C. J. Standart.

Fred. J. Blackman, counsel.

Action begun in Supreme Court and discontinued on defendant paying twenty-five ($25) dollars and costs.

No. 6702.

Sample taken by agents, John J. Coughlin and C. J. Standart.

Ira W. Smith, counsel.

Action begun in Supreme Court and settled upon payment by defendant of fifty ($50) dollars and costs.

No. 6766.

Sample taken by agents, C. J. Standart and John J. Coughlin.

Ira W. Smith, counsel.

Action begun in Supreme Court and settled upon payment of sixty ($60) dollars.

No. 6767.

Sample taken by agent, C. J. Standart.

Ira W. Smith, counsel.

Action begun in Supreme Court and compromised by payment of fifty ($50) dollars by defendant.

No. 6701.

Sample taken by agents, John J. Coughlin and C. J. Standart.

Ira W. Smith, counsel.

Action begun in Supreme Court and settled by payment of fifty ($50) dollars by defendant.

The work of stable inspection and looking after the so-called "bob veal law" has taken up quite a good deal of time, but most of the work in this line has been one of persuasion, and I have not recommended any prosecutions. However, if the price of milk keeps up, the temptation will be strong for some parties to run their calves off under age, and we intend to keep a sharp lookout for them.

I believe that the efforts of this Department to improve the conditions of agriculture and the purity of the food products which come under our care are appreciated in this division and the Department is well thought of.

I wish to express thanks to Dr. John A. Miller, the chemist who has analyzed all of our samples, for his painstaking work and

his readiness at all times to do work we have taken to him. Also to all the agents in this division, who have been at all times ready to do their duty, even though it necessitated being up at 2 o'clock in the morning, as is the case many times.

Allow me to especially thank you for your ever kind words and good advice in many cases that have come up in the past year.

Yours respectfully,

A. L. TWICHELL,

Assistant Commissioner.

Report of J. P. Clark.

Hon. Charles A. Wieting, *Commissioner of Agriculture:*

Dear Sir.— In submitting my annual report for the year ending September 30, 1899, it is a pleasure to refer to the prosperous condition of those engaged in agriculture and especially in dairying, which is the leading agricultural industry of this part of the State.

The people of the towns and cities of this division are largely engaged in manufacturing industries of various kinds. Employment has been steady and wages good, thereby furnishing a home-market for farm produce at remunerative prices.

The general employment of labor has rendered it difficult in the vicinity of some of the larger manufacturing towns for farmers to obtain sufficient help to secure their crops, but the universal rejoicing at the extraordinary demand for labor has more than offset any inconvenience arising from this source.

Prices obtained for dairy products have been much in advance of those for several years past. Notwithstanding this fact, the cupidity of some people has seemed to make the better prices a temptation to them to adulterate milk.

The work of the cheese instructors furnished by the State continues to manifest itself in improvement of quality.

There were thirteen exhibits of cheese from this division at the New York State Fair. Of these, two scored 100 points; two, 99½ points; two, 99 points; and the balance from 98 to 96 points. There were also eight exhibits of butter; one scoring 98 points; two, 97½ points; one, 97 points; two, 96½ points; and two, 96 points.

The law compelling the branding of what is known as "New Process," or "Renovated Butter," has brought about an increased demand for good straight creamery and dairy butter.

While there is some objection to the law by dealers who are willing to allow some deception in the sale of goods, or, at least, do not care to have consumers fully informed as to the nature of purchases, yet the law meets with the general approval of producers and consumers, and of such dealers as are willing at all times to permit the sale of wares on their merits.

Prosecutions.

Cases reported at the close of last year have been disposed of as follows:

MILK.

LABEL No. 3291.

Attorney: Hon. Fred. A. Robbins, Hornellsville, N. Y.
Witness: C. B. Wakefield.
Attorney decided best not to bring an action.

LABEL No. 3292.

Attorney: Hon. Fred. A. Robbins.
Witness: C. B. Wakefield.
Penalty and costs of thirty-five dollars ($35) paid by defendant.

LABEL No. 5905.

Attorney: Hon. Fred. A. Robbins.
Witness: C. B. Wakefield.
Penalty and costs of thirty dollars ($30) paid by defendant.

LABEL No. 5909.

Attorney: Hon. Fred. A. Robbins.
Witness: C. B. Wakefield.
Attorney thought it best not to bring an action on account of indigent circumstances of defendant.

LABEL No. 3279.

Attorney: G. W. Cole.

Witness: John E. Kruse.

Defendant agreed to pay a penalty of forty dollars ($40), but has paid only ten dollars ($10).

LABEL No. 3276.

Attorney: Hon. L. F. Stearns.

Witnesses: W. J. Corbett, J. P. Clark.

Penalty and costs of one hundred and twenty-five dollars ($125) paid by defendant.

LABEL No. 5873.

Attorney: Hon. L. F. Stearns.

Witnesses: W. J. Corbett, J. P. Clark.

Penalty and costs of sixty-five dollars ($65) paid by defendant.

LABEL No. 5872.

Attorney: Hon. L. F. Stearns.

Witness: J. P. Clark.

Penalty and costs of one hundred and twenty-five dollars ($125) paid by defendant, with case No. 7306.

LABEL No. 5881.

Attorney: A. B. Partridge.

Witnesses: C. B. Wakefield, John E. Kruse.

Penalty and costs of forty dollars ($40) agreed to by defendant, but nothing paid as yet.

LABEL No. 5884.

Attorney: A. B. Partridge.
Witnesses: John E. Kruse, W. J. Corbett.
Penalty and costs of sixty-five dollars ($65) paid by defendant.

LABEL No. 5885.

Attorney: A. B. Partridge.
Witnesses: John E. Kruse, W. J. Corbett.
Penalty and costs of seventy dollars ($70) paid by defendant.

LABEL No. 3284.

Attorney: A. B. Partridge.
Witnesses: W. J. Corbett, John E. Kruse.
Penalty of twenty-five dollars ($25) paid by defendant.

LABEL No. 5917.

Attorney: A. B. Partridge.
Witnesses: John E. Kruse, W. J. Corbett.
Still in the hands of the attorney.

LABEL No. 5908.

Attorney: A. B. Partridge.
Witnesses: C. B. Wakefield, John E. Kruse.
Penalty and costs of forty dollars ($40) paid by defendant.

LABEL No. 5886.

Attorney: A. B. Partridge.

Witnesses: John E. Kruse, C. B. Wakefield.
Penalty and costs of forty dollars ($40) paid by defendant.

LABEL No. 5887.

Attorney: A. B. Partridge.
Witnesses: John E. Kruse, C. B. Wakefield.
Penalty of twenty-five dollars ($25) paid by defendant.

LABEL No. 5870.

Attorney: W. N. Renwick.
Witnesses: John E. Kruse, C. B. Wakefield.
Action pending in Supreme Court.

LABEL No. 5869.

Attorney: W. N. Renwick.
Witnesses: C. B. Wakefield, W. J. Corbett.
Penalty and costs of sixty-five dollars ($65) paid by defendant.

LABEL No. 5927.

Attorney: W. N. Renwick.
Witnesses: C. B. Wakefield, W. J. Corbett.
Penalty and costs of sixty-five dollars ($65) paid by defendant.

LABEL No. 5852.

Attorney: Hon. O. A. Fuller.
Witnesses: C. B. Wakefield, John E. Kruse.
Still in the hands of the attorney.

LABEL No. 5868.

Attorney: Hon. O. A. Fuller.

Witnesses: C. B. Wakefield, W. J. Corbett.

Penalty and costs of forty dollars ($40) paid by defendant.

LABEL No. 5903.

Attorney: W. N. Renwick.

Witnesses: C. B. Wakefield, John E. Kruse.

Penalty and costs of one hundred and twenty dollars ($120) paid by defendant.

LABEL No. 5867.

Attorney: W. N. Renwick.

Witnesses: C. B. Wakefield, W. J. Corbett.

Penalty and costs of one hundred dollars ($100) paid by defendant.

LABEL No. 5855.

Attorney: W. N. Renwick.

Witnesses: C. B. Wakefield, W. J. Corbett.

Action pending in Supreme Court.

LABEL No. 7365.

Attorney: Hon. O. A. Fuller.

Witnesses: W. J. Corbett, C. B. Wakefield.

Penalty and costs of forty dollars ($40) paid by defendant.

LABEL No. 7306.

Attorney: Hon. L. F. Stearns.

Witnesses: J. P. Clark, W. J. Corbett.

(See Label No. 5872.)

LABEL No. 7356.

Attorney: Hon. O. A. Fuller.

Witnesses: J. P. Clark, C. B. Wakefield.

Defendant resides in Pennsylvania; agreed to pay penalty and costs of forty-five dollars ($45), but has only paid twenty dollars as yet.

LABEL No. 7357.

Attorney: Hon. O. A. Fuller.

Witness: C. B. Wakefield.

Penalty and costs of sixty-five dollars ($65) paid by defendant.

LABEL No. 5930.

Attorney: Hon. O. A. Fuller.

Witness: C. B. Wakefield.

Defendant has absconded.

LABEL No. 5915.

Attorney: A. B. Partridge.

Witnesses: W. J. Corbett, J. P. Clark.

Penalty and costs of sixty-five dollars ($65) paid by defendant.

LABEL No. 5916.

Attorney: A. B. Partridge.

Witnesses: W. J. Corbett, J. P. Clark.

Penalty and costs of sixty-five dollars ($65) paid by defendant.

LABEL No. 5889.

Attorney: A. B. Partridge.

Witnesses: John E. Kruse, W. J. Corbett.

Penalty and costs of sixty dollars ($60) paid by defendant.

VINEGAR.

LABEL No. 2159.

Attorney: L. L. Fancher.
Witnesses: John E. Kruse, W. J. Corbett.
Penalty of twenty-five dollars ($25) paid by defendant.

LABEL No. 2170.

Attorney: L. L. Fancher.
Witnesses: John E. Kruse, W. J. Corbett.
Penalty of twenty-five dollars ($25) paid by defendant.

LABEL No. 2171.

Attorney: L. L. Fancher.
Witnesses: John E. Kruse, W. J. Corbett.
Penalty of twenty-five dollars ($25) paid by defendant.

LABEL No. 2172.

Attorney: L. L. Fancher.
Witnesses: John E. Kruse, W. J. Corbett.
Penalty of twenty-five dollars ($25) paid by defendant.

LABEL No. 2173.

Attorney: L. L. Fancher.
Witnesses: John E. Kruse, W. J. Corbett.
Penalty of twenty-five dollars ($25) paid by defendant.

LABEL No. 2174.

Attorney: L. L. Fancher.

Witnesses: John E. Kruse, W. J. Corbett.

Circumstances in connection with this case make it unjust to bring an action.

LABEL No. 2175.

Attorney: L. L. Fancher.

Witnesses: John E. Kruse, C. B. Wakefield.

Penalty of twenty-five dollars ($25) paid by defendant.

LABEL No. 2176.

Attorney: Hon. L. F. Stearns.

Witnesses: John E. Kruse, C. B. Wakefield.

None of the goods having been sold, attorney thought best not to bring an action.

LABEL No. 2170.

Attorney: L. L. Fancher.

Witnesses: C. B. Wakefield, John E. Kruse.

Penalty of twenty-five dollars ($25) paid by defendant.

LABEL No. 436.

Attorney: Hon. L. F. Stearns.

Witnesses: C. B. Wakefield, John E. Kruse.

Sample was so little below the standard, attorney thought best not to bring an action.

The following are the cases taken during the year which have been placed in the hands of an attorney:

MILK.

LABEL No. 5890.

Attorney: A. B. Partridge.
Witnesses: John E. Kruse, C. B. Wakefield.
Chemist: Hugh C. Troy.
Penalty and costs of fifty dollars ($50) paid by defendant.

LABEL No. 7350.

Attorney: Hon. O. A. Fuller.
Chemist: John A. Miller.
Witnesses: C. B. Wakefield, W. J. Corbett.
Penalty and costs of sixty-five dollars ($65) paid by defendant.

LABEL No. 7358.

Attorney: Hon. O. A. Fuller.
Chemist: John A. Miller.
Witnesses: C. B. Wakefield, W. J. Corbett.
Penalty and costs of forty dollars ($40) paid by defendant.

LABEL No. 5891.

Attorney: A. B. Partridge.
Chemist: Hugh C. Troy.
Witnesses: John E. Kruse, C. B. Wakefield.
Action pending in Supreme Court.

LABEL No. 5892.

Attorney: A. B. Partridge.
Chemist: John A. Miller.
Witnesses: John E. Kruse, C. B. Wakefield.
Action pending in Supreme Court.

LABEL No. 7353.

Attorney: Hon. George E. Towne.
Chemist: Hugh C. Troy.
Witnesses: John E. Kruse, W. J. Corbett.
Action pending in Supreme Court.

LABEL No. 7355.

Attorney: Hon. Geo. E. Towne.
Chemist: Hugh C. Troy.
Witnesses: John E. Kruse, W. J. Corbett.
Action pending in Supreme Court.

The following cases have not yet been placed in the hands of an attorney:

VINEGAR.

LABEL No. 2110.

Chemist: Hugh C. Troy.
Witnesses: C. B. Wakefield, John E. Kruse.

MILK.

LABEL No. 5897.

Chemist: Hugh C. Troy.
Witnesses: John E. Kruse, W. J. Corbett.

LABEL No. 5893.

Chemist: Hugh C. Troy.
Witnesses: John E. Kruse, W. J. Corbett.

LABEL No. 5896.

Chemist: Hugh C. Troy.
Witnesses: John E. Kruse, W. J. Corbett.

LABEL No. 5898.

Chemist: Hugh C. Troy.
Witnesses: John E. Kruse, W. J. Corbett.

LABEL No. 5899.

Chemist: Hugh C. Troy.
Witnesses: John E. Kruse, W. J. Corbett.

LABEL No. 5932.

Chemist: Hugh C. Troy.
Witnesses: John E. Kruse, W. J. Corbett.

LABEL No. 5934.

Chemist: Hugh C. Troy.
Witnesses: John E. Kruse, C. B. Wakefield.

LABEL No. 5936.

Chemist: Hugh C. Troy.
Witnesses: John E. Kruse, W. J. Corbett.

LABEL No. 5935.

Chemist: Hugh C. Troy.
Witnesses: John E. Kruse, W. J. Corbett.

LABEL No. 5938.

Chemist: Hugh C. Troy.
Witnesses: John E. Kruse, C. B. Wakefield.

LABEL No. 7970.

Chemist: Hugh C. Troy.
Witnesses: C. B. Wakefield, W. J. Corbett.

LABEL No. 7969.

Chemist: Hugh C. Troy.
Witnesses: C. B. Wakefield, W. J. Corbett.

LABEL No. 7965.

Chemist: Hugh C. Troy.
Witnesses: C. B. Wakefield, W. J. Corbett.

LABEL No. 7968.

Chemist: Hugh C. Troy.
Witnesses: C. B. Wakefield, W. J. Corbett.

LABEL No. 7964.

Chemist: Hugh C. Troy.
Witnesses: C. B. Wakefield, W. J. Corbett.

LABEL No. 7963.

Chemist: Hugh C. Troy.
Witness: C. B. Wakefield.

LABEL No. 7967.

Chemist: Hugh C. Troy.
Witnesses: C. B. Wakefield, W. J. Corbett.

LABEL No. 7966.

Chemist: Hugh C. Troy.
Witnesses: C. B. Wakefield, W. J. Corbett.

LABEL No. 2433.

Chemist: John A. Miller.
Witnesses: W. J. Corbett, J. P. Clark.

LABEL No. 7979.

Chemist: John A. Miller.
Witnesses: W. J. Corbett, C. B. Wakefield.

LABEL No. 7983.

Chemist: John A. Miller.
Witness: W. J. Corbett.

Detail of Work Performed.

REPORT OF C. B. WAKEFIELD.

Number of cheese factories examined	98
Number of butter factories examined	4
Number of cities and villages examined	27

Number of shipping stations examined	3
Number of dairies examined	20
Number of stores examined	175
Number of samples of milk examined	2,637
Number of samples of vinegar examined	245
Number of days inspection work	182
Number of days special work	23
Number of days attending court	7
Number of samples of milk below standard	8

REPORT OF W. J. CORBETT.

Number of butter factories inspected	37
Number of cheese factories inspected	66
Number of stores examined for oleomargarine	174
Number of stores where vinegar was tested	200
Number of restaurants examined for oleomargarine	10
Number of hotels examined for oleomargarine	6
Number of milk peddlers inspected	133
Number of lactometer tests made	2,931
Number of tests made for butter fat with Babcock test	733
Number of cities and villages where milk and vinegar were tested	24
Number of samples of milk sent to chemist	32
Number of samples of vinegar sent to chemist	5
Number of vinegar tests made	231
Number of herds examined	24
Number of days on special duty	10
Number of days on inspection work	214
Number of samples of milk below standard	6

REPORT OF JOHN E. KRUSE.

Number of cheese factories inspected	124
Number of butter factories inspected	4
Number of cities and villages inspected	52

Number of dairies inspected	17
Number of shipping stations inspected	1
Number of stores inspected	322
Number of samples of milk tested	3,268
Number of samples of vinegar tested	333
Number of samples of butter tested	20
Number of days of inspection work	205
Number of days of special work	25
Number of days attending court	6
Number of samples of milk below standard	10

The agents in this division cannot be too highly commended for their continued enterprise and zeal in promoting the best interests of the Department in every respect and in detecting violations of the law.

Allow me to extend my thanks to yourself and your assistants for the uniform courtesy received at your hands.

J. P. CLARK,
Assistant Commissioner.

Report of Edward J. Wheeler.

Mr. Charles A. Wieting, *Commissioner of Agriculture, Capitol, Albany, N. Y.:*

Dear Sir.— I have the honor to transmit herewith a report on methods of calculating total solids in milk samples, when the lactometer reading, or specific gravity and the amount of fat are known.

Questions have frequently arisen in regard to one or another formula, and samples have been taken by inspectors of this Department, when a Babcock fat test and the calculation would have shown that the sample of milk under suspicion was really above the State standard.

METHODS FOR CALCULATING SOLIDS IN MILK, WHEN LACTOMETER READING, OR SPECIFIC GRAVITY AND PER CENT. OF FAT ARE KNOWN.

F. Clausnizer and A. Mayer in 1867, assumed that each per cent. of solids not fat raised the specific gravity .00375, and that each 1 per cent. of fat lowered it .0010.

From this they formulated as follows:

$$1 + (T - F).00375 - Spg. = .0010F. \text{ or}$$

$$\text{Total solids} = \frac{Spg. + F.00475 - 1}{.00375}$$

In December, 1887, *Hehner and Richmond* read before a meeting of the Society of Public Analysts of England a paper on the relation of solids, fat and specific gravity of milk.

Their formula, based upon corrected methods of milk analysis, Adam's for fat was given as follows:

$$T = F - \frac{.2186G}{.859} \text{ to be corrected by an addition of } .05\left(\frac{G-2.5}{T}\right)$$

whenever $\frac{G}{T}$ is greater than 2.5.

This was simplified to a formula which, for average milks, was said to give results to within about .02 of the longer formula.

$$T = \frac{G}{4} + \frac{6F}{5}$$

Hehner and Richmond formula was modified by *Richmond* in 1889 to read,

$$T = 1.17F + .263\frac{G}{Spg.}$$

Afterward in 1894, again modified by *Richmond* to read,

$$T = .2625\ \frac{G}{Spg} + 1.2\ F$$

And from this he deduces for a working formula, by which "the result will not differ (in extreme cases) more than .02 from the other formula,"

$$T = \frac{G}{4} + \frac{6}{5}\ F + .14$$

In the report of the Wisconsin Experiment Station for 1891, *S. M. Babcock* recommended the use of the following:

$$T = \left(\frac{100\ Spg - Spg\ F}{100 - 1.0753\ Spg\ F} - 1\ (100 - F)\ 2.6 + F\right)$$

He gives for a simple working formula, from which results nearly as accurate as obtained from preceding can be obtained when milk contains not more than 6 per cent. of fat,

$$T = \frac{L + .7\ F}{3.8} + F \qquad (L = \text{reading on Quevenne.})$$

Hence with our symbols, this would read,

$$T = \frac{G + .7\ F}{3.8} + F$$

He states that this formula, for milks containing less than 3 per cent. of fat, will give results a trifle too high, and on milks con-

taining more than 4 per cent. of fat a trifle too low; but they will amount to less than .1 of 1 per cent.

If it is desirable to get more accurate results, the following corrections can be made:

For milks containing less than 1% fat, subtract .09.

For milks containing from 1 to 2% fat, subtract .06.

For milks containing from 2 to 3% fat, subtract .03.

For milks containing from 3 to 4% fat, subtract .00.

For milks containing from 4 to 5% fat, add .03.

For milks containing from 5 to 6% fat, add .06.

Adding .03 for each increase of 1 per cent. of fat.

In the same report he still further simplifies by giving also the following formula:

$$T = \frac{G + F}{4} + F.$$

In the twelfth annual report of the Wisconsin Station, 1895, *S. M. Babcock* makes another report on the relation of total solids to specific gravity and fat, in which he states that experience at that station has shown the constant as used in former formulæ to be too large for the average milks of this country; and recommends changing to 2.5, which would then make the corrected formula to read as follows:

$$T = \left(\frac{100\ \text{Spg} - \text{Spg F}}{100 - 1.0753\ \text{Spg F}} - 1\right)(100 - F)\ 2.5 + F$$

It is claimed that this formula "will in most cases, when applied to normal milks, give results agreeing closely with those obtained by gravimetric analysis." By an inspection of a table made out on this formula, Babcock found that practically the solids increased at the rate of .25 for each lactometer degree and .02 for each tenth per cent. of fat.

This relation would be expressed by the formula

$$T = \frac{G}{4} + 1.2\ F$$

As is noticed by Babcock this is identical with the original short formula of Hehner and Richmond, given above.

A formula very largely used abroad for the determination of total solids, when the specific gravity and amount of fat are known, is that of Prof. *W. Fleischmann.*

$$T = 1.2\ F + 2.665\ \frac{100\ Spg - 100}{Spg}$$

In the formulæ given, the abbreviations used are always the same when same factor is meant, and the formulæ as given by the original investigators have consequently been changed in respect to some of the letters used, but the formula remains the same.

When used here, Spg. always stands for specific gravity at 60° Fahr.

When used here, G always stands for Spg. × 1000 — 1000.

When used here, F always stands for fat.

When used here, T always stands for total solids.

The exactness with which, by calculation, an agent of this Department using the lactometer and Babcock fat test can approximate the amount of total solids in milk is shown by the following tables.

The total solids in about 500 samples of milk collected and sent to chemists between October 1, 1896, and October 1, 1897, have been calculated by three different formulæ, and the results, together with the chemical analyses of the same samples, given. The lactometer readings are those noted on the books of the inspectors when suspicious samples have been taken, on the street or at the factory, when the examination has been made. The inspectors had no knowledge that the readings would ever be used for the present purpose. In most cases no Babcock fat test was made, so that the per cent. of fat used in the calculations was the amount found by chemical anlysis.

It should be noted that the lactometer readings, from which the specific gravity values have been deducted, have been taken at temperatures varying between the extremes of 36° to 88° Fahrenheit, and doubtless many times readings have been hastily read

and hastily noted, the inspector knowing that a chemical analysis would be necessary before anything would be done toward prosecuting the seller.

In making the calculations the three different formulæ used were the short *Richmond*

$$T = \frac{G}{4} + \frac{6\,F}{5} + .14$$

Babcock No. 1.

$$T = \frac{G - .7\,F}{3.8} + F$$

Babcock No. 2, which is the same as the original short *Hehner and Richmond.*

$$T = \frac{G}{4} + 1.2\,F$$

Number.	Water.	Solids.	Fat.	Solids not fat.	Ash.	Lactometer reading.	Lactometer reading, corrected to 60°.	Specific gravity.	Richmond method. Total solids	Babcock method (1). Total solids.	Babcock method (2). Total solids.	Chemist.
2815.....	88.81	11.19	3.39	7.80	.65	92 at 60°	92	1.02668	10.87	11.03	10.73	Wheeler.
2816.....	88.31	11.69	3.84	7.85	.56	88 at 74°	94	1.02726	11.55	11.72	11.41	do
1128.....	88.86	11.14	3.58	7.56	.57	90 at 60°	90	1.02619	10.97	11.13	10.83	do
2865.....	86.12	13.88	6.59	7.29	.55	96 at 48°	91	1.02630	14.61	14.72	14.47	do
2866.....	90.26	9.74	3.40	6.34	.48	90 at 50°	86	1.02494	10.45	10.58	10.31	do
4151.....	88.102	11.898	3.84	8.05	.64	90 at 68°	93	1.02697	11.48	11.64	11.34	do
4152.....	89.991	10.009	3.009	7.00	.57	90 at 43°	83	1.02407	9.76	9.889	9.620	do
4153.....	86.75	13.25	4.89	8.36	.65	104 at 44°	98	1.02842	13.10	13.26	12.96	do
4154.....	88.28	11.72	3.84	7.88	.57	90 at 60°	90	1.02619	11.28	11.43	11.14	do
4155.....	88.572	11.428	3.799	7.629	.67	96 at 48°	91	1.02630	11.26	11.419	11.128	do
2869.....	87.45	12.55	4.55	8.00	.71	88 at 64°	90	1.02619	12.14	12.09	12.00	do
4159.....	89.011	10.989	3.393	7.596	.65	98 at 42°	91	1.02630	10.78	10.939	10.641	do
938.....	88.00	12.00	4.29	7.71	.60	92 at 60°	92	1.02668	11.95	12.10	11.81	do
950.....	88.98	11.02	3.43	7.59	.55	92 at 60°	92	1.02668	10.92	11.08	10.78	do
943.....	89.46	10.54	2.48	8.06	.64	102 at 60°	102	1.02958	10.50	10.72	10.36	do
944.....	88.80	11.20	3.82	7.38	.51	100 at 54°	98	1.02842	11.82	12.00	11.68	do
945.....	88.83	11.17	3.81	7.36	.56	90 at 50°	86	1.02494	10.94	11.07	10.80	do
949.....	88.76	11.24	3.60	7.64	.61	94 at 68°	97	1.02813	11.49	11.66	11.35	do
3012.....	88.32	11.68	3.60	8.08	.56	94 at 60°	94	1.02726	11.27	11.43	11.13	do
1145.....	89.39	10.61	3.28	7.33	.54	88 at 60°	88	1.02552	10.45	10.60	10.31	do
2817.....	88.67	11.33	3.79	7.54	.49	90 at 60°	90	1.02619	11.22	11.38	11.08	do
2818.....	89.03	10.97	3.53	7.44	.50	90 at 60°	90	1.02619	10.91	11.07	10.77	do
3007.....	88.02	11.98	3.85	8.13	.64	100 at 60°	100	1.02900	12.01	12.19	11.87	do
3008.....	89.09	10.91	1.72	9.19	.76	120 at 60°	120	1.03480	10.90	11.19	10.76	do
3009.....	87.14	12.86	3.56	9.30	.72	114 at 60°	114	1.03306	12.67	12.91	12.53	do
2873.....	90.36	9.64	2.28	7.36	.58	94 at 60°	94	1.02726	9.68	9.87	9.54	do
2874.....	88.73	11.27	3.35	7.92	.58	92 at 60°	92	1.02668	10.83	10.98	10.69	do

3013.....	89.17	10.83	3.07	7.76	.61	90 at 60°	90	1.02619	10.36	10.52	10.22	do
1150.....	86.74	13.26	4.89	8.37	.62	96 at 60°	96	1.02784	12.96	13.11	12.82	do
3014.....	88.56	11.44	3.56	7.88	.65	96 at 60°	96	1.02784	11.37	11.54	11.23	do
3015.....	87.80	12.20	3.65	8.55	.67	102 at 60°	102	1.02958	11.91	12.10	11.77	do
3016.....	89.28	10.72	3.32	7.40	.59	90 at 60°	90	1.02619	10.66	10.82	10.52	do
3017.....	88.97	11.03	3.40	7.63	.57	98 at 40°	90	1.02619	10.76	10.91	10.62	do
3050.....	88.13	11.87	4.17	7.70	.62	88 at 64°	90	1.02619	11.68	11.83	11.54	do
3018.....	87.55	12.45	4.11	8.34	.64	94 at 60°	94	1.02726	11.88	12.04	11.74	do
4920.....	88.39	11.61	3.48	8.13	.69	98 at 60°	98	1.02842	11.41	11.60	11.27	do
1.....	87.71	12.29	3.58	8.71	.69	110 at 60°	110	1.0319	12.40	12.63	12.26	do
2.....	87.72	12.28	3.51	8.77	.67	120 at 48°	115	1.03335	12.68	12.93	12.54	do
3027.....	88.54	11.46	3.40	8.06	.69	96 at 60°	96	1.02784	11.48	11.35	11.04	do
3028.....	87.63	12.37	4.19	8.18	.68	94 at 60°	94	1.02726	11.97	12.13	11.83	do
3029.....	86.56	13.44	4.68	8.76	.71	98 at 60°	98	1.02842	12.85	13.02	12.71	do
3030.....	88.93	11.07	3.09	7.98	.65	98 at 60°	98	1.02842	10.94	11.13	10.80	do
3031.....	88.31	11.69	3.36	8.33	.69	98 at 60°	98	1.02842	11.27	11.45	11.13	do
3032.....	88.71	11.29	3.28	8.01	.66	100 at 48°	95	1.02755	10.95	11.13	10.81	do
3033.....	88.68	11.32	3.29	8.03	.66	102 at 48°	97	1.02813	11.11	11.29	10.97	do
3034.....	86.22	13.78	5.60	8.18	.63	88 at 60°	88	1.02552	13.24	13.34	13.10	do
3035.....	88.18	11.82	3.59	8.23	.68	98 at 60°	98	1.02842	11.54	11.73	11.40	do
3036.....	87.85	12.15	3.75	8.42	.74	100 at 60°	100	1.02900	11.86	12.07	11.72	do
3037.....	87.93	12.07	4.00	8.07	.67	94 at 60°	94	1.02726	11.75	11.91	11.61	do
3038.....	87.48	12.52	4.03	8.49	.67	95 at 62°	96	1.02784	11.93	12.09	11.79	do
3039.....	89.71	10.29	3.07	7.22	.56	94 at 40°	86	1.02494	10.05	10.19	9.91	do
3040.....	88.67	11.33	3.59	7.74	.62	89 at 60°	89	1.02581	10.89	11.04	10.75	do
3041.....	88.95	11.05	3.28	7.77	.62	90 at 66°	92	1.02668	10.74	10.90	10.60	do
3042.....	88.47	11.53	3.39	8.14	.66	90 at 63°	91	1.02630	10.77	10.93	10.63	do
3043.....	88.64	11.36	3.83	7.53	.60	96 at 46°	90	1.02619	11.27	11.42	11.13	do
3044.....	89.75	10.25	2.20	8.05	.68	104 at 46°	98	1.02842	9.84	10.08	9.74	do
3045.....	89.09	10.91	2.86	8.05	.61	98 at 57°	97	1.02813	10.60	10.78	10.46	do
3046.....	88.17	11.83	3.92	7.91	.66	98 at 40°	90	1.02619	11.38	11.53	11.24	do
3047.....	88.80	11.20	3.21	7.99	.65	100 at 42°	93	1.02697	10.73	10.89	10.59	do
3048.....	88.93	11.07	3.24	7.83	.63	90 at 60°	90	1.02619	10.56	10.72	10.42	do
4928.....	88.74	11.26	3.41	7.85	.60	92 at 60°	92	1.02668	10.90	11.05	10.76	do
3002.....	85.98	14.02	4.16	9.86	.55	120 at 60°	120	1.03480	13.83	14.08	13.69	do
4903.....	88.50	11.50	3.50	8.00	.66	100 at 40°	92	1.02668	11.01	11.16	10.87	do
2651.....	86.74	13.26	4.13	9.13	.69	100 at 60°	100	1.02900	12.34	12.52	12.20	do

Number.	Water.	Solids.	Fat.	Solids not fat.	Ash.	Lactometer reading.	Lactometer reading, corrected to 60°.	Specific gravity.	Richmond method. Total solids	Babcock method (1). Total solids.	Babcock method (2). Total solids.	Chemist.
2652.....	87.90	12.10	4.01	8.09	.64	97 at 60°	97	1.02813	11.98	12.15	11.84	Wheeler.
2653.....	88.97	11.03	3.25	7.78	.57	100 at 40°	92	1.02668	10.71	10.86	10.57	do
2674.....	87.79	12.21	3.69	8.52	.69	104 at 50°	100	1.02900	11.81	12.00	11.67	do
4929.....	92.03	7.97	2.80	5.17	.37	70 at 52°	67	1.01943	8.35	8.42	8.21	do
4930.....	88.62	11.38	3.49	7.89	.57	100 at 48°	95	1.02755	11.20	11.38	11.06	do
4931.....	86.87	13.14	4.64	8.50	.66	100 at 57°	99	1.02871	12.87	13.05	12.73	do
4932.....	88.32	11.68	3.60	8.08	.60	104 at 48°	99	1.02871	11.63	11.81	11.49	do
948.....	88.67	11.33	3.28	8.05	.67	106 at 48°	101	1.02929	11.39	11.59	11.25	do
4933.....	88.05	11.95	4.14	7.81	.64	100 at 48°	95	1.02755	11.98	12.15	11.84	do
4934.....	89.57	10.43	2.79	7.64	.62	94 at 60°	94	1.02726	10.29	10.47	10.15	do
4935.....	88.30	11.70	3.45	8.25	.68	102 at 54°	100	1.02900	11.53	11.71	11.39	do
4904.....	88.31	11.69	3.71	7.98	.62	96 at 60°	96	1.02784	11.55	11.71	11.41	do
4916.....	87.24	12.76	3.32	9.44	.73	120 at 48°	115	1.03335	12.45	12.70	12.31	do
B. M.....	78.59	21.41	12.57	8.84	.81	.....	...	.....	.....	.....	.....	do
S. B.....	81.51	18.49	9.29	9.20	.74	.....	...	.....	.....	.....	.....	do
2673.....	91.24	8.76	2.54	6.22	.51	.....	...	.....	.....	.....	.....	do
3049.....	89.04	10.96	3.25	7.71	.60	98 at 48°	93	1.02697	10.78	10.94	10.64	do
4927.....	88.33	11.67	3.76	7.91	.61	100 at 48°	93	1.02755	11.53	11.70	11.39	do
4905.....	88.10	11.90	3.78	8.12	.70	96 at 60°	96	1.02784	11.63	11.80	11.49	do
4906.....	88.01	11.99	3.79	8.20	.66	97 at 60°	97	1.02813	11.71	11.89	11.57	do
4907.....	87.78	12.22	3.97	8.25	.64	97 at 60°	97	1.02813	11.93	12.10	11.79	do
4908b....	88.52	11.48	3.40	8.08	.65	97 at 60°	97	1.02813	11.25	11.42	11.11	do
4921.....	88.21	11.79	3.47	8.32	.65	98 at 60°	98	1.02842	11.40	11.58	11.26	do
2654.....	89.72	10.28	3.10	7.18	.58	92 at 48°	87	1.02523	10.16	10.31	10.02	do
2655.....	88.83	11.17	2.96	8.21	.64	100 at 44°	94	1.02726	10.50	10.67	10.36	do
3003.....	88.09	11.91	3.34	8.57	.67	100 at 60°	100	1.02900	11.39	11.58	11.25	do
4923.....	88.87	11.13	3.52	7.61	.62	86 at 60°	86	1.02494	10.59	10.73	10.45	do

4902.....	87.96	12.04	3.68	8.36	.65	.....	...	.....	.....	.....	.....	do
2625.....	88.72	11.28	3.74	7.54	.58	.....	...	.....	.....	.....	.....	do
2657.....	89.64	10.36	3.22	7.14	.57	100 at 52°	97	1.02813	11.03	11.21	10.89	do
2658.....	87.37	12.63	4.57	8.09	.69	98 at 60°	98	1.02842	12.72	12.89	12.58	do
2659.....	88.30	11.70	3.34	8.36	.63	98 at 58°	97	1.02813	11.17	11.35	11.03	do
1137.....	88.66	11.34	3.16	8.18	.69	100 at 50°	95	1.02784	10.89	11.06	10.75	do
1138.....	88.04	11.96	3.63	8.33	.66	98 at 60°	98	1.02842	11.59	11.77	11.45	do
1139.....	88.06	11.94	3.55	8.39	.64	102 at 52°	99	1.02871	11.57	11.75	11.43	do
1140.....	88.37	11.63	3.31	8.38	.69	100 at 60°	100	1.02900	11.36	11.55	11.22	do
4915.....	88.65	11.35	3.77	7.58	.55	94 at 60°	94	1.02726	11.47	11.63	11.33	do
2668.....	88.91	11.09	3.09	8.00	.60	98 at 60°	98	1.02842	10.94	11.13	10.80	do
2669.....	87.312	12.668	4.009	8.679	.64	96 at 60°	96	1.02784	11.91	12.069	11.770	do
2670.....	87.84	12.16	3.80	8.36	.62	96 at 60°	96	1.02784	11.66	11.82	11.52	do
2671.....	87.13	12.87	4.21	8.66	.66	96 at 60°	96	1.02784	12.15	12.31	12.01	do
2672.....	87.30	12.70	4.12	8.58	.66	100 at 50°	96	1.02784	12.04	12.20	11.90	do
4914.....	88.07	11.93	3.40	8.53	.67	110 at 54°	108	1.03132	12.05	12.26	11.91	do
2819.....	88.46	11.54	2.63	8.91	.73	.....	...	.....	.....	.....	.....	do
4909.....	88.55	11.45	2.27	9.18	.66	121 at 46°	115	1.03335	11.19	11.46	11.05	do
1141.....	88.16	11.84	3.35	8.49	.61	98 at 60°	98	1.02842	11.26	11.44	11.12	do
1143.....	88.14	11.86	3.54	8.32	.65	100 at 56°	98	1.02842	11.48	11.67	11.34	do
1144.....	88.77	11.23	3.74	7.49	.57	92 at 55°	90	1.02619	11.16	11.32	11.02	do
4925.....	87.58	12.42	4.06	8.36	.63	97 at 60°	97	1.02813	12.04	12.21	11.90	do
4926.....	88.20	11.80	3.82	7.98	.60	93 at 60°	93	1.02697	11.46	11.62	11.32	do
2976.....	88.89	11.11	3.05	8.06	.65	99 at 56°	97	1.02813	10.83	11.01	10.69	do
2977.....	88.91	11.09	3.55	7.44	.60	92 at 59°	92	1.02668	11.07	11.22	10.93	do
2978.....	88.74	11.26	3.24	8.02	.62	100 at 52°	97	1.02813	11.05	11.23	10.91	do
2988.....	87.95	12.05	3.58	8.74	.65	100 at 61°	100	1.02900	11.68	11.87	11.54	do
2876.....	61.45	38.55	11.39	27.16	1.92	.....	...	.....	.....	.....	.....	do
2984.....	89.05	10.95	3.14	7.81	.52	96 at 56°	94	1.02726	10.71	10.89	10.57	do
2985.....	88.67	11.33	3.22	8.11	.56	98 at 54°	96	1.02784	10.96	11.13	10.82	do
2986.....	89.44	10.56	1.09	9.46	.69	124 at 56°	122	1.03650	10.56	10.89	10.42	do
2820.....	87.99	12.01	3.13	8.88	.70	112 at 58°	111	1.03219	11.93	12.17	11.79	do
2875.....	87.84	12.16	3.38	8.78	.64	102 at 56°	100	1.02900	11.44	11.63	11.30	do
3004.....	88.69	11.31	3.30	8.01	.51	96 at 60°	96	1.02784	11.06	11.23	10.92	do
3019.....	87.67	12.33	4.00	8.33	.64	96 at 60°	96	1.02784	11.90	12.06	11.76	do
3020.....	87.90	12.10	2.54	9.56	.69	118 at 60°	118	1.03422	11.73	12.01	11.59	do
3021.....	86.15	13.85	3.99	9.86	.73	120 at 60°	120	1.03480	13.62	13.88	13.48	do

Number.	Water.	Solids.	Fat.	Solids not fat.	Ash.	Lactometer reading.	Lactometer reading, corrected to 60°.	Specific gravity.	Richmond method. Total solids	Babcock method (1). Total solids.	Babco k method (2). Total solids.	Chemist.
3022	86.92	13.08	4.44	8.54	.59	93 at 60°	93	1.02697	12.20	12.35	12.06	Wheeler.
3023	87.42	12.58	3.42	9.16	.60	98 at 60°	98	1.02812	11.34	11.52	11.20	do
3024	86.38	13.62	3.97	9.65	.75	118 at 56°	116	1.03364	13.31	13.35	13.17	do
3025	88.27	11.73	3.57	8.16	.55	84 at 56°	82	1.02378	10.36	10.44	10.32	do
3026	87.41	12.59	3.60	8.99	.70	118 at 60°	118	1.03423	12.53	12.70	12.39	do
3005	88.74	11.26	3.82	7.44	.51	95 at 60°	95	1.02755	11.00	11.18	10.86	do
3075	88.00	12.00	3.76	8.24	.59	100 at 60°	100	1.02900	11.66	11.84	11.52	do
3076	88.21	11.79	3.40	8.39	.66	100 at 58°	99	1.02871	11.49	11.66	11.33	do
3079	88.32	11.68	3.43	8.25	.59	100 at 60°	100	1.02900	11.26	11.45	11.12	do
3080	89.31	10.69	3.33	7.36	.54	94 at 60°	94	1.02726	10.82	10.99	10.68	do
3081	88.65	11.35	3.19	8.16	.67	108 at 56°	106	1.03071	11.64	11.85	11.50	do
3082	89.48	10.52	3.89	6.63	.10	102 at 60°	102	1.02958	12.81	12.30	12.17	do
3083	88.76	11.24	3.02	8.22	.66	100 at 60°	100	1.02900	11.01	11.20	10.87	do
3091	89.15	10.85	3.24	7.61	.53	98 at 60°	98	1.02842	11.12	11.31	10.98	do
3092	88.35	11.65	3.83	7.82	.58	94 at 60°	94	1.02726	11.34	11.70	11.40	do
3093	88.82	11.18	3.38	7.80	.61	96 at 60°	96	1.02812	11.50	11.44	11.15	do
3094	88.92	11.08	3.35	7.73	.59	95 at 60°	95	1.02755	11.24	11.45	11.14	do
3095	90.32	9.68	2.91	6.77	.54	90 at 56°	90	1.02619	10.17	10.33	10.03	do
3090	87.57	12.43	3.75	8.68	.56	100 at 52°	95	1.02833	11.26	11.44	11.12	do
3096	87.60	12.40	3.80	8.60	.64	98 at 60°	98	1.02842	11.74	11.91	11.60	do
3098	86.95	13.15	4.68	8.47	.61	98 at 60°	98	1.02842	11.92	12.09	11.78	do
3083	88.70	11.30	3.03	8.27	.63	.....	.....	.....	8.89	9.17	8.75	do
2661	85.92	14.08	5.05	9.03	.68	108 at 70°	112	1.03248	.....	.....	.....	do
2691	90.97	9.03	0.73	8.30	.63	94 at 60°	94	1.02812	12.06	12.63	11.92	do
2693	88.34	11.66	4.02	7.64	.58	91 at 60°	94	1.02812	12.06	12.23	11.92	do
2695	87.79	12.21	4.02	8.19	.61	100 at 57°	94	1.02812	12.06	.....	.....	do

2696.....	88.48	11.52	3.39	8.13	.61	90 at 60°	90	1.02619	10.74	10.90	10.60	do
2697.....	88.14	11.86	3.97	7.89	.62	82 at 82°	90	1.02619	11.44	11.59	11.30	do
2999.....	90.79	9.21	2.29	6.92	.45	70 at 60°	70	1.02030	7.81	8.05	7.81	do
3000.....	88.66	11.34	3.33	8.01	.55	94 at 54°	92	1.02668	10.80	10.96	10.66	do
3006.....	88.72	11.28	3.21	8.97	.65	98 at 56°	96	1.02784	10.95	11.12	10.81	do
3354.....	88.88	11.12	2.21	8.91	.57	118 at 58°	117	1.03393	11.27	11.54	11.13	do
3356.....	88.67	11.33	3.42	7.91	.57	82 at 86°	90	1.02619	10.78	10.94	10.64	do
2692.....	89.08	10.92	2,066	8.914	.69	118 at 56°	116	1.03364	10.957	11.228	10.817	do
5301.....	89.36	10.64	1.81	8.83	.68	120 at 58°	119	1.03451	10.93	11.22	10.79	do
5302.....	89.44	10.56	1.60	8.96	.68	116 at 56°	114	1.03306	10.32	10.59	10.18	do
5303.....	88.97	11.03	1.84	9.19	.68	120 at 58°	119	1.03451	10.96	11.26	10.82	do
5304.....	88.55	11.45	3.41	8.04	.58	100 at 60°	100	1.02900	11.48	11.66	11.34	do
5305.....	88.49	11.51	3.23	8.28	.60	96 at 60°	96	1.02784	10.97	11.15	10.83	do
5306.....	85.24	14.76	6.24	8.52	.68	88 at 76°	94	1.02726	14.43	14.56	14.29	do
5307.....	89.19	10.81	3.66	7.15	.48	80 at 70°	84	1.02436	10.62	10.74	10.48	do
5308.....	87.30	12.70	4.58	8.12	.60	100 at 58°	99	1.02871	12.80	12.97	12.66	do
2694.....	91.90	8.10	1.13	6.97	.50	100 at 50°	96	1.02784	8.45	8.66	8.31	do
5309.....	89.28	10.72	1.94	8.78	.69	118 at 52°	115	1.03335	10.79	11.07	10.65	do
5310.....	88.21	11.79	4.13	7.66	.64	88 at 66°	90	1.02619	11.63	11.78	11.49	do
5311.....	86.82	13.18	4.30	8.88	.67	88 at 80°	96	1.02784	12.26	12.41	12.12	do
5312.....	91.49	8.51	1.89	6.62	.48	86 at 63°	87	1.02523	8.70	8.87	8.56	do
5313.....	89.25	10.75	3.02	7.73	.61	96 at 65°	98	1.02842	10.86	11.05	10.72	do
5314.....	92.23	7.77	1.06	6.71	.48	90 at 50°	86	1.02494	7.64	7.81	7.50	do
5315.....	87.73	12.27	3.56	8.71	.67	116 at 60°	116	1.03364	12.82	13.06	12.68	do
5316.....	89.25	10.75	2.98	7.77	.65	90 at 70°	94	1.02726	10.52	10.70	10.38	do
5317.....	88.18	11.82	3.73	8.09	.55	84 at 80°	92	1.02668	11.28	11.43	11.14	do
5318.....	89.05	10.95	3.18	7.77	.60	100 at 50°	96	1.02784	10.91	11.09	10.77	do
5319.....	90.38	9.62	2.26	7.36	.52	90 at 66°	92	1.02668	9.52	9.69	9.38	do
5320.....	91.01	8.99	0.85	8.14	.64	102 at 76°	108	1.03132	8.99	9.24	8.85	do
5333.....	87.94	12.06	3.73	8.33	68	92 at 76°	98	1.02842	11.71	11.89	11.57	do
5335.....	89.85	10.15	3.42	6.73	.53	84 at 60°	84	1.02436	10.33	10.46	10.19	do
5341.....	92.05	7.95	0.93	7.02	.60	96 at 58°	95	1.02755	8.13	8.35	7.99	do
5345.....	88.44	11.56	3.66	7.90	.61	86 at 80°	94	1.02726	11.34	11.50	11.20	do
5346.....	88.20	11.80	4.21	7.59	.60	98 at 50°	94	1.02726	12.00	12.15	11.86	do
5347.....	89.04	10.96	2.66	8.03	.75	104 at 60°	104	1.03016	10.78	11.08	10.73	do
5348.....	90.27	9.83	3.07	6.76	.52	84 at 64°	86	1.02494	10.05	10.19	9.91	do
5349.....	89.14	10.86	3.68	7.18	.58	86 at 64°	88	1.02552	10.93	11.07	10.79	do

Number.	Water.	Solids.	Fat.	Solids not fat.	Ash.	Lactometer reading.	Lactometer reading, corrected to 60°.	Specific gravity.	Richmond method. Total solids	Babcock method (1). Total solids.	Babcock method (2). Total solids.	Chemist.
5350.....	88.11	11.89	4.08	7.81	.62	82 at 85°	92	1.02667	11.69	11.85	11.55	Wheeler.
3355.....	88.96	11.04	3.43	7.61	.58	100 at 52°	97	1.02813	11.28	11.46	11.14	do
3353.....	87.74	12.26	4.21	8.05	.61	82 at 88°	93	1.02697	11.93	12.08	11.79	do
2077.....	88.41	11.59	3.64	7.95	.70	94 at 60°	94	1.02726	11.31	11.48	11.17	do
5351.....	88.14	11.86	3.86	8.00	.60	94 at 72°	99	1.02871	11.94	12.12	11.80	do
5352.....	89.39	10.61	3.04	7.57	.57	86 at 77°	93	1.02697	10.52	10.69	10.38	do
5353.....	88.39	11.61	3.62	7.99	.62	98 at 60°	98	1.02842	11.58	11.76	11.44	do
5354.....	88.71	11.29	3.83	7.46	.62	94 at 62°	95	1.02755	11.61	11.61	11.47	do
5355.....	89.28	10.72	3.43	7.29	.57	88 at 64°	90	1.02619	10.79	10.95	10.65	do
5356.....	88.90	10.10	3.38	7.72	.59	95 at 60°	95	1.02755	11.07	11.25	10.93	do
5357.....	89.64	10.36	2.87	7.49	.57	90 at 64°	92	1.02668	10.25	10.41	10.11	do
2321.....	88.42	11.58	2.63	8.95	.56	.....	...	.....	.....	.....	.....	do
5332.....	90.83	9.17	0.31	8.86	...	118 at 58°	117	1.03393	8.99	9.29	8.85	do
5321.....	90.77	9.23	3.19	6.04	.41	68 at 60°	68	1.01972	8.89	8.96	8.75	do
5322.....	89.49	10.51	3.63	6.88	.54	82 at 64°	84	1.02436	10.58	10.70	10.44	do
5330.....	87.47	12.53	5.60	6.93	.58	88 at 56°	86	1.02494	13.09	13.19	12.95	do
5331.....	90.67	9.33	3.02	6.31	.51	88 at 54°	86	1.02494	9.99	10.13	9.85	do
5360.....	88.60	11.40	3.86	7.54	.58	96 at 60°	96	1.02784	11.73	11.89	11.59	do
5361.....	88.27	11.73	4.53	7.20	.57	82 at 71°	86	1.02494	11.80	11.92	11.66	do
5362.....	88.13	11.87	3.70	8.17	.66	96 at 67°	99	1.02871	11.75	11.93	11.61	do
2686.....	88.53	11.47	4.19	7.28	.60	.....	...	.....	.....	.....	.....	do
2915.....	86.35	13.65	5.38	8.27	.63	93 at 54°	91	1.02630	13.16	13.29	13.02	do
2918.....	87.38	12.62	4.36	8.26	.62	96 at 60°	96	1.02784	12.33	12.48	12.19	do
2920.....	87.09	12.91	4.21	8.70	.64	100 at 47°	95	1.02755	12.07	12.23	11.93	do
2921.....	86.65	13.35	4.82	8.53	.62	96 at 55°	94	1.02726	12.73	12.88	12.59	do
2922.....	87.34	12.66	4.46	8.20	.61	100 at 56°	98	1.02842	12.59	12.76	12.45	do
2923.....	88.01	11.99	3.73	.826	.60	98 at 60°	98	1.02842	11.71	11.89	11.57	do

2924.....	87.90	12.40	3.88	8.52	.70	100 at 60°	100	1.02900	12.04	12.22	11.90	do
2925.....	87.38	12.62	4.14	8.48	.58	98 at 60°	98	1.02842	12.20	12.38	12.06	do
2822.....	88.98	11.02	3.66	7.36	.51	.....	...	.....	.....	.....	.....	do
2823.....	87.23	12.77	3.58	9.19	.75	.....	...	.....	.....	.....	.....	do
5323.....	88.16	11.84	3.86	7.98	.65	98 at 55°	96	1.02784	11.73	11.89	11.59	do
5324.....	87.94	12.06	4.05	8.01	.68	98 at 53°	95	1.02755	11.88	12.04	11.74	do
2824.....	89.11	10.89	3.24	7.65	.56	92 at 60°	92	1.02668	10.69	10.85	10.55	do
5363.....	88.54	11.46	3.72	7.74	.57	95 at 52°	92	1.02668	11.27	11.42	11.13	do
5364.....	88.24	11.76	3.94	7.82	.63	94 at 60°	94	1.02726	11.67	11.83	11.53	do
2684.....	85.00	15.00	6.14	8.86	.68	98 at 60°	98	1.02842	14.60	14.75	14.46	do
5356.....	88.52	11.48	4.07	7.41	.60	.....	...	.....	.....	.....	.....	do
5366.....	88.82	11.18	3.55	7.63	.64	.....	...	.....	.....	.....	.....	do
5367.....	88.96	11.04	3.37	7.67	.63	.....	...	.....	.....	.....	.....	do
5368.....	88.05	11.95	3.96	7.99	.62	95 at 60°	95	1.02755	11.77	11.93	11.63	do
5369.....	88.24	11.76	3.12	8.64	.72	109 at 60°	109	1.03161	11.78	12.01	11.64	do
2825.....	88.95	11.05	2.05	9.00	.67	118 at 60°	118	1.03422	11.15	11.43	11.01	do
5370.....	87.78	12.22	3.93	8.29	.56	.....	...	.....	.....	.....	.....	do
5371.....	87.96	12.04	4.08	7.96	.56	.....	...	.....	.....	.....	.....	do
5451.....	86.91	13.09	4.48	8.61	.64	98 at 64°	100	1.02900	12.76	12.93	12.62	do
5456.....	88.00	12.00	3.97	8.03	.58	96 at 62°	97	1.02813	11.93	12.10	11.79	do
5763.....	88.47	11.53	3.66	7.87	.55	102 at 42°	95	1.02755	11.41	11.58	11.27	do
5765.....	87.73	12.27	4.28	7.99	.59	100 at 42°	93	1.02697	12.01	12.16	11.87	do
5766.....	88.58	11.42	3.64	7.78	.57	100 at 42°	93	1.02697	11.24	11.40	11.10	do
5327.....	88.67	11.33	3.58	7.75	.59	94 at 50°	90	1.02619	10.97	11.13	10.83	do
5755.....	89.17	10.83	3.30	7.53	.56	94 at 50°	90	1.02619	10.64	10.80	10.53	Troy.
4376.....	88.2	11.8	2.9	8.9	.719	110 at 52°	107	1.03103	11.37	11.60	11.23	do
4299.....	89.22	10.78	3.23	7.55	.643	94 at 60°	94	1.02726	10.82	10.99	10.68	do
4296.....	88.68	11.32	3.50	7.82	.630	94 at 60°	94	1.02726	11.15	11.31	11.01	do
4293.....	89.17	10.83	3.13	7.70	.647	96 at 60°	96	1.02784	10.85	11.03	10.71	do
4282.....	89.24	10.76	3.29	7.47	.620	93 at 60°	93	1.02697	10.82	10.99	10.68	do
4301.....	89.32	10.68	3.23	7.45	.662	92 at 60°	92	1.02668	10.68	10.84	10.54	do
4258.....	90.28	9.72	2.95	6.77	.558	84 at 60°	84	1.02436	9.77	9.90	9.63	do
4315.....	88.18	11.82	3.76	8.06	.651	98 at 60°	98	1.02842	11.74	11.93	11.61	do
4311.....	88.14	11.56	3.93	7.63	.659	96 at 60°	96	1.02784	11.81	11.98	11.67	do
4317.....	89.09	10.91	3.56	7.35	.694	90 at 60°	90	1.02619	10.95	11.10	10.81	do
3449.....	89.85	10.42	3.12	7.3	.603	88 at 64°	90	1.02619	10.42	10.58	10.28	do
3448.....	90.72	9.28	2.51	6.77	.557	86 at 66°	88	1.02552	9.51	9.68	9.39	do

Number.	Water.	Solids.	Fat.	Solids not fat.	Ash.	Lactometer reading.	Lactometer reading, corrected to 60°.	Specific gravity.	Richmond method. Total solids	Babcock method (1). Total solids.	Babcock method (2). Total solids.	Chemist.
3445.....	88.67	11.33	3.6	7.73	.617	88 at 68°	91	1.02630	11.03	11.18	10.89	Troy.
3494.....	90.33	9.67	3.49	5.18	.547	84 at 62°	85	1.02465	10.48	10.61	10.34	do
3442.....	90.26	9.74	2.76	6.98	.575	88 at 70°	92	1.02668	10.12	10.28	9.98	do
3493.....	89.52	10.48	2.98	7.5	.630	88 at 66°	90	1.02619	10.25	10.42	10.11	do
3443.....	88.57	11.43	4.28	7.15	.579	84 at 68°	87	1.02523	11.57	11.70	11.43	do
3496.....	89.8	10.2	2.53	7.67	.602	88 at 64°	90	1.02619	9.71	9.88	9.57	do
3450.....	88.71	11.29	3.83	7.46	.612	84 at 72°	89	1.02581	11.18	11.32	11.04	do
3430.....	88.17	11.83	3.12	8.71	.738	100 at 64°	102	1.02958	11.27	11.47	11.13	do
3428.....	89.29	10.71	2.88	7.83	.637	.....	...	.....	.....	.....	.....	do
3418.....	88.88	11.12	3.21	7.91	.723	92 at 66°	94	1.02726	10.80	10.97	10.66	do
4424.....	88.43	11.57	3.69	7.88	.607	.....	...	.....	.....	.....	.....	do
4277.....	89.32	10.68	3.20	7.48	.645	93 at 60°	93	1.02697	10.72	10.88	10.58	do
4280.....	90.16	9.84	3.13	6.71	.607	86 at 60°	86	1.02494	10.12	10.26	9.98	do
4255.....	89.17	10.83	2.96	7.87	.601	90 at 60°	90	1.02619	10.23	10.39	10.09	do
4276.....	90.20	9.80	2.62	7.18	.630	92 at 60°	92	1.02668	9.95	10.12	9.81	do
4248.....	89.04	10.96	1.95	9.01	.713	.....	...	.....	.....	.....	.....	do
4275.....	89.17	10.83	3.58	7.25	.640	.....	...	.....	.....	.....	.....	do
4339.....	89.08	10.92	3.13	7.79	.547	80 at 60°	80	1.02320	9.69	9.81	9.55	do
4348.....	88.93	11.07	3.74	7.33	.621	102 at 60°	102	1.02958	12.01	12.21	11.87	do
4309.....	88.09	11.91	3.97	7.94	.693	94 at 60°	94	1.02726	11.71	11.87	11.57	do
4343.....	88.43	11.57	4.35	7.22	.630	80 at 60°	80	1.02320	11.16	11.25	11.02	do
4318.....	88.45	11.55	3.95	7.60	.621	90 at 60°	90	1.02619	11.42	11.56	11.28	do
4278.....	89.73	10.63	2.8	7.83	.608	94 at 60°	94	1.02726	10.31	10.48	10.17	do
4312.....	88.37	11.63	3.74	7.89	.613	.....	...	.....	.....	.....	.....	do
4294.....	89.1	10.9	3.32	7.58	.677	96 at 60°	96	1.02784	11.08	11.25	10.94	do
4292.....	90.88	9.12	3.05	6.07	.515	70 at 60°	70	1.02030	8.87	8.95	8.73	do
4295.....	91.65	8.35	2.78	5.57	.508	80 at 60°	80	1.02320	9.27	9.39	9.13	do

4316.....	88.74	11.26	3.73	7.35	.587	92 at 60°	92	1.02668	11.28	11.43	11.14	do
4308.....	88.63	11.37	3.47	7.90	.637	94 at 60°	94	1.02726	11.11	11.28	10.97	do
4290.....	89.26	10.74	3.54	7.20	.604	90 at 60°	90	1.02619	10.92	11.08	10.78	do
4279.....	90.00	10.00	3.31	6.69	.608	90 at 60°	90	1.02619	10.65	10.81	10.51	do
4344.....	90.44	9.56	3.41	6.15	.554	74 at 60°	74	1.02416	10.27	10.39	10.13	do
4350.....	88.91	11.09	3.78	7.31	.629	92 at 60°	92	1.02668	11.34	11.49	11.20	do
4341.....	89.67	10.33	3.14	7.19	.631	92 at 60°	92	1.02668	10.57	10.73	10.43	do
4336.....	88.67	11.33	3.52	7.81	.633	95 at 60°	95	1.02755	11.24	11.41	11.10	do
4313.....	88.49	11.51	3.8	7.71	.611	.....	...	.....	.....	.....	.....	do
4314.....	88.44	11.56	3.68	7.88	.610	95 at 60°	95	1.02755	11.43	11.60	11.29	do
4297.....	89.56	10.44	3.34	7.10	.593	80 at 60°	80	1.02320	9.94	10.06	9.89	do
4298.....	88.34	11.66	3.87	7.79	.645	.....	...	.....	.....	.....	.....	do
4821.....	88.30	11.70	2.29	9.41	....	.....	...	.....	.....	.....	.....	do
3850.....	88.87	11.13	2.26	8.87	....	.....	...	.....	.....	.....	.....	Miller.
3831.....	89.05	10.95	1.35	9.60	....	.....	...	.....	.....	.....	.....	do
3844.....	82.27	11.73	3.04	8.69	....	120 at 36°	110	1.03199	11.75	11.99	11.61	do
3833.....	88.53	11.47	3.24	8.23	....	.....	...	.....	.....	.....	.....	do
3809.....	89.63	10.37	3.16	7.21	....	90 at 38°	81	1.02349	9.80	9.92	9.66	do
3816.....	88.60	11 40	2.41	8.99	....	120 at 36°	110	1.03190	11.00	11.24	10.86	do
3817.....	88.32	11.68	4.01	7.67	....	.....	...	.....	.....	.....	.....	do
3818.....	88.38	11.62	3.81	7.81	....	.....	...	.....	.....	.....	.....	do
3803.....	89.15	10.85	2.92	7.93	....	100 at 40°	92	1.02668	10.31	10.47	10.17	do
3696.....	87.49	12.15	2.82	9.69	....	124 at 40°	116	1.03364	11.93	12.19	11.79	do
3682.....	88.60	11.40	2.35	9.05	....	120 at 40°	112	1.03248	11.08	11.33	10.94	do
3631.....	88.33	11.67	3.67	8.00	....	98 at 40°	90	1.02619	11.08	11.23	10.94	do
3667.....	88.31	11.69	3.04	8.65	....	100 at 60°	100	1.02900	11.03	11.23	10.89	do
3668.....	87.53	12.47	2.88	9.59	....	124 at 46°	118	1.03422	12.14	12.41	12.00	do
3659.....	87.57	12.43	2.84	9.59	....	124 at 42°	117	1.03393	12.02	12.29	11.88	do
3660.....	88.55	11.45	3.96	7.49	....	80 at 64°	82	1.02378	10.83	10.94	10.69	do
3853.....	88.53	11.47	2.58	8.89	.61	114 at 58°	113	1.03277	11.42	11.67	11.28	do
5277.....	88.30	11.70	2.87	8.83	.66	.....	...	.....	.....	.....	.....	do
5268.....	89.15	10.85	2.82	8.03	.54	.....	...	.....	.....	.....	.....	do
3885.....	90.21	9.79	2.39	7.40	.55	100 at 52°	97	1.02813	10.03	10.23	9.89	do
3858.....	87.99	12.01	2.89	9.12	.59	118 at 56°	116	1.03364	12.01	12.27	11.87	do
5267.....	88.69	11.31	2.60	8.71	.64	.....	...	.....	.....	.....	.....	do
4898.....	88.84	11.16	1.87	9.29	.65	116 at 58°	115	1.03335	10.71	10.99	10.57	do
5222.....	89.66	10.34	3.40	6.94	.43	94 at 56°	92	1.02668	10.89	11.04	10.75	do

Number.	Water.	Solids.	Fat.	Solids not fat.	Ash.	Lactometer reading.	Lactometer reading, corrected to 60°.	Specific gravity.	Richmond method. Total solids	Babcock method (1). Total solids.	Babcock method (2). Total solids.	Chemist.
5256.....	89.19	10.81	2.57	8.24	.59	102 at 60°	102	1.02958	10.61	10.82	10.47	Miller.
5259.....	89.07	10.93	3.68	7.25	.44	92 at 60°	92	1.02668	11.22	11.37	11.08	do
5258.....	88.90	11.10	3.27	7.83	.56	106 at 58°	105	1.03045	11.67	11.88	11.53	do
5257.....	88.86	11.14	2.62	8.52	.58	116 at 54°	114	1.03306	11.54	11.80	11.40	do
5214.....	89.40	10.60	1.56	9.04	.63	.....	...	.....	.....	.....	.....	do
3964.....	90.26	9.73	2.89	6.14	.673	100 at 60°	100	1.02900	10.85	11.05	10.71	Deecke.
3967.....	89.26	10.73	2.49	7.63	.608	96 at 42°	89	1.02581	9.57	9.74	9.43	do
2508.....	89.34	10.65	2.76	7.32	.573	94 at 60°	94	1.02726	10.26	10.44	10.12	do
4265.....	88.38	11.61	2.96	7.87	.76	98 at 60°	98	1.02842	10.79	10.98	10.65	Engelhardt.
4263.....	88.99	11.009	2.92	7.47	.61	102 at 40°	94	1.02726	10.45	10.63	10.31	do
3192.....	88.59	11.41	2.55	8.86	....	120 at 40°	112	1.03248	11.32	11.56	11.18	Lattimore.
3189.....	88.55	11.45	2.33	9.12	....	115 at 60°	115	1.03335	11.26	11.53	11.12	do
3173.....	89.18	10.82	1.29	9.53	....	.....	...	.....	.....	.....	.....	do
3159.....	89.30	10.70	2.25	8.45	....	102 at 54°	100	1.02900	10.09	10.29	9.95	do
3161.....	88.39	11.61	3.45	8.16	....	92 at 60°	92	1.02668	10.95	11.10	10.81	do
3162.....	87.94	12.06	2.22	9.84	....	110 at 62°	111	1.03219	10.84	11.10	10.70	do
3157.....	88.82	11.18	3.18	8.00	....	100 at 63°	101	1.02929	11.27	11.47	11.13	do
3151.....	88.00	12.00	2.10	9.90	....	.....	...	.....	.....	.....	.....	do
3244.....	88.40	11.60	3.45	8.15	....	97 at 62°	98	1.02842	11.38	11.56	11.24	do
3246.....	88.78	11.22	3.01	8.21	....	102 at 41°	94	1.02726	10.56	10.73	10.42	do
3963.....	88.81	11.19	3.08	8.11	....	98 at 54°	96	1.02784	10.79	10.97	10.65	do
3959.....	88.30	11.70	3.70	8.00	....	92 at 58°	91	1.02630	11.15	11.30	11.01	do
3960.....	88.95	11.05	2.56	8.49	....	.....	...	.....	.....	.....	.....	do
3962.....	90.94	9.06	2.64	6.42	....	78 at 56°	76	1.02204	8.81	8.92	8.67	do
4416.....	89.36	10.64	2.99	7.65	....	107 at 60°	107	1.03103	11.47	11.70	11.33	do
4415.....	88.94	11.06	2.98	8.08	....	110 at 55°	108	1.03132	11.54	11.77	11.40	do
4044.....	89.82	10.18	2.02	8.16	....	97 at 70°	101	1.02929	9.88	10.10	9.74	do

4045.....	88.05	11.95	2.73	9.22	....	118 at 54°	116	1.03364	11.82	12.08	11.68	do
4026.....	87.47	12.53	3.91	8.62	....	98 at 60°	98	1.02842	11.93	12.10	11.79	do
4028.....	88.00	12.00	3.17	8.83	....	104 at 60°	104	1.03016	11.48	11.69	11.34	do
4030.....	87.64	12.36	3.30	9.06	....	110 at 56°	108	1.03132	11.93	12.15	11.79	do
4006.....	88.26	11.74	3.17	8.57	....	100 at 66°	102	1.02958	11.33	11.53	11.19	do
3199.....	88.18	11.82	2.74	9.08	....	120 at 47°	115	1.03335	11.75	12.02	11.61	do
4365.....	88.13	11.87	3.60	8.27	....	.....	...	.....	.....	....	.....	do
5295.....	89.14	10.86	2.43	8.43	.50	102 at 58°	101	1.02929	10.37	10.58	10.23	Brown.
5290.....	88.42	11.58	3.38	8.20	.55	92 at 70°	96	1.02784	11.15	11.32	11.01	do
4890.....	88.08	11.92	2.90	9.02	.62	108 at 74°	114	1.03306	11.88	12.13	11.74	do
5249.....	88.08	11.92	2.94	8.98	.58	102 at 72°	107	1.03103	11.41	11.64	11.27	do
5248.....	89.34	10.66	2.83	7.83	.52	94 at 72°	99	1.02871	10.70	10.90	10.56	do
5237.....	89.02	10.98	2.96	8.02	.53	96 at 70°	100	1.02900	10.94	11.13	10.80	do
5236.....	89.21	10.79	2.45	8.34	.53	100 at 72°	105	1.03045	10.69	10.91	10.55	do
5238.....	88.56	11.44	2.37	9.07	.62	108 at 62°	109	1.03161	10.88	11.12	10.74	do
5234.....	88.42	11.58	3.14	8.44	.56	104 at 70°	108	1.03132	11.73	11.96	11.59	do
5224.....	88.42	11.58	3.14	8.44	.56	102 at 72°	107	1.03103	11.65	11.88	11.51	do
5229.....	88.29	11.71	3.45	8.26	.64	118 at 56°	116	1.03364	12.69	12.93	12.55	do
4893.....	88.97	11.03	2.81	8.22	.53	98 at 64°	100	1.02900	10.76	10.95	10.62	do
4892.....	87.65	12.35	2.95	9.70	.59	120 at 62°	121	1.03509	12.45	12.72	12.31	do
5253.....	88.26	11.34	3.40	8.34	.55	.....	...	.....	.....	.....	.....	do
5220.....	88.37	11.63	3.33	8.30	.58	92 at 78°	99	1.02871	11.30	11.49	11.16	do
5250.....	90.55	9.45	2.52	7.48	.57	.....	...	.....	.....	.....	.....	do
2357.....	91.93	8.07	2.66	5.41	.48	64 at 60°	64	1.0185	7.97	8.03	7.83	Cavanaugh.
4254.....	88.46	11.54	3.65	7.27	.62	102 at 50°	98	1.02842	11.62	11.80	11.48	Nims.
825.....	88.46	11.54	3.51	7.39	.64	98 at 54°	96	1.02784	11.31	11.48	11.17	do
3908.....	88.64	11.36	3.28	7.45	.63	98 at 54°	96	1.02784	11.03	11.21	10.89	do
827.....	88.24	11.76	3.76	7.49	.60	98 at 60°	96	1.02784	11.61	11.68	11.47	do
245.....	89.10	10.90	2.93	7.30	.67	98 at 60°	98	1.02842	10.75	10.94	10.61	do
847.....	88.91	11.09	3.24	7.23	.62	98 at 68°	98	1.02842	11.12	11.31	10.98	do
3905.....	89.42	10.58	2.92	7.11	.55	.....	...	.....	.....	.....	.....	do
4266.....	88.90	11.10	3.49	7.61	.64	98 at 60°	98	1.02842	11.42	11.61	11.28	Smith.
2506.....	91.68	8.31	2.81	5.05	.444	.....	...	.....	.....	....	.....	do
2593.....	88.72	11.27	3.50	7.76	.550	86 at 62°	87	1.02523	10.64	10.78	10.50	do
2591.....	88.70	11.29	3.11	8.17	.448	92 at 60°	92	1.02668	10.54	10.70	10.40	do
2598.....	88.74	11.25	3.30	7.45	.497	92 at 60°	92	1.02668	10.77	10.92	10.63	do
2592.....	88.36	11.63	3.37	8.25	.593	88 at 64°	90	1.02619	10.72	10.88	10.58	do

Number.	Water.	Solids.	Fat.	Solids not fat.	Ash.	Lactometer reading.	Lactometer reading, corrected to 60°.	Specific gravity.	Richmond method. Total solids	Babcock method (1). Total solids.	Babcock method (2). Total solids.	Chemist.
2594.....	88.56	11.43	3.35	8.07	.586	90 at 60°	96	1.02619	10.70	10.85	10.56	Smith.
2596.....	88.16	11.83	3.32	8.51	.649	92 at 60°	92	1.02668	10.79	10.95	10.65	do
2595.....	89.90	10.19	3.11	7.08	.559	82 at 60°	82	1.02378	9.81	9.94	9.67	do
2599.....	88.30	11.69	2.95	8.18	.553	94 at 60°	94	1.02726	10.49	10.66	10.35	do
2600.....	89.86	10.13	2.30	7.39	.432	82 at 60°	82	1.02378	8.84	8.98	8.70	do
4274.....	89.16	10.84	3.30	7.07	.47	94 at 60°	94	1.02726	10.91	11.08	10.77	McGregory.
4264.....	89.72	10.28	2.91	6.90	.47	92 at 60°	92	1.02668	10.30	10.46	10.16	do
4273.....	90.17	9.83	2.97	6.43	.43	82 at 60°	82	1.02378	9.64	9.77	9.50	do
4300.....	87.94	12.06	3.48	8.09	.49	90 at 60°	90	1.02619	10.85	11.01	10.71	do
4267.....	87.91	12.09	4.14	7.98	.47	92 at 60°	92	1.02668	11.77	11.92	11.63	do
4272.....	89.50	10.50	3.17	6.86	.47	90 at 60°	90	1.02619	10.48	10.64	10.34	do
4270.....	89.54	10.46	3.21	6.78	.47	86 at 60°	86	1.02494	10.22	10.36	10.08	do
4269.....	89.59	10.41	3.38	6.57	.46	84 at 60°	84	1.02436	10.28	10.41	10.14	do
4271.....	90.45	9.55	2.81	6.30	.44	82 at 60°	82	1.02378	9.45	9.58	9.31	do

Report of Parker C. McIlhiney.

Hon. Charles A. Wieting, *Commissioner of Agriculture:*

Dear Sir.— I have the honor to submit the following report upon linseed oil and its adulterants:

Linseed oil is the oil obtained from the seeds of the flax plant, *Linum usitatissimum.* Formerly the oil used in the United States was obtained principally from Indian and other foreign seed, but of late years the domestic seed has gradually replaced the foreign, although considerable quantities of Calcutta seed are still imported. The oil obtained from Calcutta seed usually commands a higher price, as it is of a light color, and is by some considered superior to that obtained from American seed. Any real superiority of Calcutta oil is, however, difficult to define, and it is likely that prejudice in favor of the imported article has much to do with the preference. Calcutta oil is generally sold raw and is largely consumed by varnish makers.

Linseed is a crop which has a very exhausting effect upon the soil, and it is for this reason grown in the United States mostly on the frontier of the agricultural territory. The result of this is that the principal sources of supply for domestic seed are gradually moving further west and northwest. It is estimated that 13,000,000 to 14,000,000 bushels of flaxseed were grown in the United States in 1898, and that the production in 1899 will reach 15,000,000 bushels. The usual yield of oil is in the neighborhood of 2.3 gallons per bushel of seed.

The methods of extracting the oil are two, by extraction with volatile solvents and by pressing. The extraction method is not, to my knowledge, practiced in New York State. To extract the oil by pressing, the seed when it arrives at the mill is first cleaned, then

ground to meal in high-speed rolls, and heated by steam. In some mills the heating is done by steam injected directly into the meal as it runs in a stream into a tub used as a reservoir of hot meal. In other works the heating-tub is steam-jacketed and no free steam is admitted to the meal. From the heating-pan the meal is delivered to a machine which fills it into canvas forms and presses these forms lightly to make them keep their shape sufficiently to handle. They are then placed in hydraulic presses and subjected to high pressure, causing the oil to run out. The oil at this stage contains various foreign matters, called collectively "foots," which have been pressed out with the oil. These are removed by settling or by filtration through cloth and paper in filter-presses, or by both. The separation of "foots" on storage goes on for a long time and the oil improves by storage and settling, even after careful filtration.

The operation of "boiling oil" is one about which great secrecy is observed by the manufacturers. When linseed oil is heated to a temperature of 300° to 500° F., its drying properties are increased. If salts of lead or of manganese are incorporated into the oil a similar result is produced, and the simplest, and in former times the universal method of increasing the drying properties of linseed oil, was to heat the oil to near the temperature at which it undergoes destructive distillation, 550° F., or thereabouts, and stir in at the same time oxide of lead, or oxide of manganese, or both. Heating the oil to such a high temperature darkens it very much, and as light colored oil is often demanded, so that the oil will not discolor pigments suspended in it more than necessary, and as this high heat is wasteful of oil, time and fuel, it has become the practice to make a "drier" of the metallic oxides by heating them with a small portion of the oil until they are dissolved, and then adding this drier to the main body of the oil maintained at a much lower temperature, usually not much above the boiling point of water. The result of this process is that there is not so great a loss of oil during the boiling, and the oil obtained is lighter in color. The use of this method of making boiled by adding to raw oil at a comparatively low temperature, a drier made by a separate operation,

has induced the majority of makers of boiled oil to buy their driers from a varnish manufacturer, who is better equipped from the nature of his business to make driers than the linseed crusher is. The division of labor between the varnish maker and the linseed oil manufacturer results in enabling the linseed crusher to dispense with all apparatus for heating oil to very high temperatures, and is on this account advantageous to him. This same division of labor has, however, had the further effect of allowing the manufacturer of driers an opportunity to introduce into them for his own profit, materials which the oil manufacturer, who is endeavoring to produce a pure article, would not wish to add to his oil.

It is claimed by the makers of the so-called "bunghole" oil (a simple mixture of raw linseed oil with drier), and also by the manufacturers of driers to be used in this way, that the oil made by this process is just as good as kettle boiled oil, that no fraud is intended by the manufacturers of such oil, and that, in fact, it is simply a variety of boiled oil.

On the other hand it is claimed by the linseed crushers and others who make boiled oil from linseed oil and metallic oxides alone, that the only materials which it is necessary to add to a linseed oil in converting it into boiled oil are the oxides of lead and manganese; that no one who can obtain the proper facilities for making boiled oil, viz., a kettle in which it can be heated and agitated, finds it necessary to use a drier thinned with benzine or turpentine, and that, in fact, these are in the finished oil simply dilutents detracting from the value of the oil; that it is not necessary to use in the manufacture of drier for making boiled oil and shellac, kauri dust, rosin, or rosin oil, or, in fact, anything but linseed oil, lead and manganese, and finally that the sale as "boiled oil" of oil which contains anything but linseed oil, lead and manganese, is a fraud and should not be permitted.

The character of boiled linseed oil, as it is described in the literature, even in the latest books, does not agree with that of the oil now made in this State. It is described in the literature as being made at a high temperature in the old-fashioned way,

whereas, little, if any, oil, is now made in that way. There is a strong prejudice in the minds of most of the users of boiled oil in favor of the old-fashioned "kettle boiled" oil. Consequently, the manufacturers are somewhat averse to admitting that their oils are made after the modern fashion, although no advantages can be claimed for the old way. This prejudice in favor of strongly heated oil is so strong that the dark color of the old oil is imitated by many manufacturers by using dark colored driers, although it is perfectly evident that for use with all light colored pigments the lighter an oil is in color, other things being equal, the more desirable the oil is. This prejudice seems to be stronger in the east than in the western States.

Section 1 of chapter 412 of the law relating to linseed or flaxseed oil prohibits the manufacture or sale as boiled linseed oil, of oil which has not been heated to 225° F. The intention of this provision is undoubtedly to prevent the manufacture of "bunghole" oil, but it is difficult to understand why an oil should be excluded if it is made from proper materials at a lower temperature, and still more difficult for an analyist to ascertain the temperature to which the oil has really been heated. No means are known to me by which it is possible to find out whether a sample of boiled linseed oil has or has not been heated to 225° F.

The analytical investigation of linseed oil and its adulterants was carried on with the idea, first, of ascertaining the character of pure linseed oil sold in New York State by various manufacturers; secondly, to ascertain what the adulterants commonly used in the State are, and, thirdly, how prevalent the practice of adulteration is. With these ends in view, a series of samples was obtained, in most cases directly from the manufacturers, but partly also from large users of the oil, which are of undoubted commercial purity. Another series of samples was obtained by purchase from smaller dealers. Samples of oils likely to be used as adulterants were obtained from manufacturers or large dealers.

The tests which are valuable particularly in determining the freedom from adulteration are:

1. Specific gravity.

2. The action of bromine or iodine on the oil. Hubl and bromine Figures.

3. The percentage of unsaponifiable organic matter.

4. The amount of alkali required to convert the oil into soap. Koettstofer Figure.

5. The amount of alkali required to neutralize the acids in the oil. Acid Figure.

6. The percentage of insoluble bromine derivatives.

7. The amount of volatile oil (turpentine and benzine) contained in the oil.

Other tests often applied to linseed oil are the Maumene test, which is the measurement of the temperature caused by mixing measured amounts of the oil and sulphuric acid, the amount of oxygen absorbed by the oil when exposed to the air in thin films, called Livache's test, the index of refraction, and the action on polarized light.

1. The Specific Gravity.

Linseed oil is heavier than most other oils. Its specific gravity is expressed in terms of water at 4°.C. or 15°.5C., or water may be taken as unity at whatever temperature the determination of specific gravity is made. It is advisable that some standard of temperature should be set and adhered to in future determinations, as exactness and simplicity are above all else necessary in work that may be submitted as evidence in a court of law. It is at all events advisable that, even if the actual determination is made at a temperature different from the standard, it should be expressed in terms of water at the standard temperature. Unfortunately many of the recorded determinations do not state either the temperature at which the determination was made, or the temperature at which water is taken as unity. These determinations have consequently little legal value. I should recommend as the conditions

which combine the greatest ease with the best accord with published date, that the gravity should be determined at 15°.5 C., water at the same temperature being taken as unity. Almost all the determinations of specific gravity given in this report were made under these conditions.

The specific gravity of linseed oil may be taken with the greatest accuracy by means of a specific gravity bottle, the weight of which is determined, empty, full of water at 15°.5 C., and filled with the oil to be examined at the same temperature. Another very convenient laboratory method having only slightly inferior accuracy, and the method by which almost all the determinations given in this report were obtained, is an application of the principle of Mohr's hydrostatic balance, by using a plummet with the ordinary analytical balance. For rougher work, a delicate hydrometer may be used.

The specific gravity of raw linseed oil is given by Allen's Comm. Org. Anal., 3d ed., Vol. 2, Part 1, p. 147, as generally about .935, but varying from .931 to .937. The temperature is not stated, but it is presumably 15°.5 C. These limits are the same as those set in Benedikt, Analyse der Fette und Wachsarten, 3 Aufl., p. 429, and no oils of undoubted purity which I have examined have fallen outside of these limits. It may, therefore, be stated as an established fact that if an oil has a specific gravity at 15°.5 C., water at the same temperature being unity, that is, below .931 or above .937, is not pure raw linseed oil.

The lower limit to the specific gravity of boiled linseed oil may, without fear, be set at the same point, .931, because a linseed oil can only become heavier by heating with access of air and the addition of metallic oxides. "Bunghole" oils made with driers containing benzine may have lower specific gravities. The upper limit to the gravity it is difficult and, indeed, impossible to set, because genuine linseed oil may be raised to .950 or higher by continued heating, though it is not commonly above .940.

The change in gravity, with change in temperature, of linseed oil, and of some other oils, has been determined by Allen, Comm. Org. Anal., 3d ed., Vol. 2, Part. 1, p. 33, and the following are some of his results.

Nature of oil.	Correction for 1° C.
Linseed	.000649
Menhaden	.000654
Cottonseed	.000629
Rape	.000620

According to the results obtained by Saussure, the coefficient of expansion of linseed oil is not uniform between 12° C. and 94° C. He records the following results (Benedikt, p. 428):

	Specific gravity.
12° C.	.939
25° C.	.930
50° C.	.921
94° C.	.881

Calculating from these results we obtain, as the variation for 1° C., between 12° C. and 25° C., .000692; between 25° C. and 50° C., .000360, and between 50° C. and 94° C., .000909. It will be seen from the table giving the results of determinations of specific gravity at different temperatures that I do not find in the oils examined a similar change in the rate of expansion. The averages of the figures obtained with raw oils, Nos. 52 and 73, and boiled oil, No. 72, show that the change in specific gravity for 1° C., between 15°.5 C. and 28° C., was .000654; between 28° C. and 100° C., .000720, and beween 15°.5 C. and 100° C., .000712.

A low specific gravity in an oil under examination might be caused by the presence of (1) turpentine or benzine (indicated also by odor); (2) heavier petroleum oils; (3) corn or cottonseed oils.

A high specific gravity would point to (1) rosin or other resin;

(2) rosin oil; (3) excessive heating or unusual addition of metallic oxides.

2. THE ACTION OF BROMINE OR IODINE ON THE OIL.

Linseed oil is largely composed of constituents which are unsaturated, and which can, therefore, combine by direct addition with 2, 4, or 6 atoms of bromine or iodine. Of the adulterants of linseed oil, mineral and rosin oils and rosin itself possess this power only to a slight degree, and none of the other adulterants except menhaden oil possess it in as high a degree as linseed oil. Beside the principle action of bromine or iodine upon linseed oil, *i. e.*, direct addition of halogen, another action takes place by which one-half of the halogen which disappears enters into combination with the oil, and the other half combines with hydrogen which the first half has supplanted in the oil.

The substitution of bromine or iodine for hydrogen goes on to only a slight extent with seed oils and with glycerides in general, but with rosin, rosin oil, and mineral oils, the case is very different. It has been proved by the author that when bromine acts upon rosin and upon rosin oil, although a large amount of bromine is changed from the free into the combined state, almost all of the bromine is taken up by the rosin or oil by substitution, and not by addition, and in the case of ordinary American mineral oils, that taken up by substitution is a large proportion of the total absorption.

The process in most common use for determining the percentage of halogen absorbed by oils is known as the Hubl process, and though, by its use, valuable indications as to the purity and value of linseed oil are obtained, it unfortunately does not distinguish between the power of the oil to absorb halogen by addition and the power it likewise possesses of absorbing halogen by substitution. The Hubl process, on this account, fails to discriminate closely between rosin, which is one of the likeliest constituents of a linseed oil substitute, and linseed oil itself, as the Hubl figures for both substances are nearly the same.

A process described by the author (J. Amer. Chem. Soc., 16, 56), similar to one used previously by Allen for testing shale oils, distinguishes between addition and substitution, and by its use the presence of any notable amount of rosin, rosin oil, or mineral oil can be detected with a considerable degree of accuracy, and a fair idea formed of the character of the adulterant.

The Hubl is one of the best known methods of fat analysis; the method by which the Hubl figures were obtained for this report was as follows:

A solution of 25 grams of iodine and 30 grams of mercuric chloride in one litre of alcohol is allowed to stand, after making, for twenty-four hours in the dark before using. Two hundred milligrams or thereabout of the oil to be analyzed is weighed into a glass-stoppered bottle, 10 c. c. of chloroform added to dissolve the oil, and 25 c. c. of the iodine solution added. If the solution, when shaken to mix the chloroform and alcoholic liquid, does not become clear, 5 c. c. more of chloroform is added. The bottle is then allowed to remain in the dark eighteen hours, and at the end of that time a solution of potassium iodide is added, and the free iodine in the solution titrated with tenth-normal sodium thiosulphate. Twenty-five c. c. of the same iodine solution which has been placed in a similar bottle and allowed to stand with the test is titrated at the same time with thiosulphate, and the difference between the two titrations gives the amount of iodine absorbed by the oil. Full discussions of the process are given in Benedikt, Analyse der Fette und Wachsarten, and in Allen, Commercial Organic Analysis.

The bromine figures were obtained by a modification of the author's original method. The method actually used was as follows:

About 200 milligrams of the oil was placed in a dry glass-stoppered bottle, 10 c. c. of carbon tetrachloride added to dissolve the oil, and then 20 c. c. of third-normal bromine in carbon tetrachloride run in from a pipette. Another pipetteful is run into another similar bottle. It is convenient, but not absolutely necessary, that both bottles should now be cooled by immersing them

in cracked ice. This causes the formation of a partial vacuum in the bottle. The bromine need not be allowed to react with the oil for more than a few minutes, as the reaction between them is nearly instantaneous. Twenty-five c. c. of a neutral 10 per cent solution of potassium iodide is introduced into each bottle by slipping a piece of rubber tubing of suitable size over the lip of the bottle, pouring the iodine solution into the well thus formed and shifting the stopper slightly so as to allow the solution to be sucked into the bottle, or, if the bottle has not been cooled, to cause the air as it escapes from the interior to be washed by bubbling through the potassium iodide solution. This method of introducing the iodide solution effectually prevents the loss of any bromine or hydrobromic acid. As soon as the iodine solution has been introduced, the bottle is shaken, and preferably set into the ice for a couple of minutes more, so that there may be no loss of drops of the solution when the stopper is opened, caused by a slight pressure inside the bottle. The reaction between the bromine and the iodide solution causes some heat and consequent pressure. The free iodine is now titrated with neutral tenth-normal sodium thiosulphate, using as little starch as possible as indicator. At the end of this titration, 5 c. c. of a neutral 2 per cent solution of potassium iodate is added, a little more starch solution and the iodine liberated, on account of the hydrobromic acid produced in the original reaction of bromine on the oil, titrated with thiosulphate. From the figures so obtained, the total percentage of bromine which has disappeared is calculated, and the percentage of bromine found as hydrobromic acid, called the "Bromine Substitution Figure," is also calculated, while from these two the "Bromine Addition Figure" is obtained by subtracting twice the bromine substitution figure from the total bromine absorption. A consideration of the figures submitted in the table will show that if an oil contains rosin, rosin oil, or mineral oil, the fact will be brought out by this process, and an indication given by the figures so obtained as to which one is present. If the bromine substitution figure is normal, the absence

of more than a very small quantity of turpentine, benzine, rosin, or rosin oil, is assured. The process can be carried out in the time necessary for weighing and titrations, as the standard solution, unlike the Hubl solution, does not deteriorate on keeping, if tightly closed, so that it is always ready for immediate use, and there is no waiting for some hours for the reagents to act upon the oil, as in the Hubl process, for in this case the reaction takes place immediately.

It will be seen from the table of results that the Bromine Addition figure of linseed oil lies ordinarily between 100 and 110. The low figures of No. 1 and No. 2 are to be accounted for by the fact that the samples are several years old, and it is well known that keeping lowers the halogen figures of linseed oil.

A low Addition Figure may also be caused by the presence of rosin, rosin oil, benzine or mineral oils, which have figures usually below 15; by the presence of some other seed oil, the commonest of this class being corn and cottonseed oils, having figures in the neighborhood of 73 and 63, respectively; or by the oil, in case it is a boiled oil, having been boiled in the old-fashioned way at a high temperature.

If the Addition Figure is very much higher than 110, it will be found that the oil contains turpentine, as all other foreign materials added have lower figures than linseed oil.

The Bromine Substitution Figure of genuine linseed oil is commonly about 3. A much higher figure would point to turpentine, rosin, or rosin oil, which give figures from 20 to 90; to the presence of some petroleum product, benzine having a figure in the neighborhood of 15, or a heavier petroleum oil, which may have as low a figure as linseed, or may be much higher; or to the presence of mineral acid in the oil, which may be allowed for by a separate determination of its amount, as described under the determination of the Acid Figure.

The Hubl figure of raw linseed oil is given by Benedikt from 148.8 to 183.4. Boiled oil, according to the same author, may

give figures below 100. Allen gives the figures for raw oil between 170 and 181. Rowland Williams states that a very large number of raw linseed oils examined by him almost all gave figures above 180. The figure is reduced by keeping. From the table of results obtained upon the oils examined, it will be seen that the figure of pure oil is commonly in the neighborhood of 178.

It is a noteworthy fact that both the Hubl and the Bromine Addition figures are practically the same for boiled oil as now made as for raw oil, whereas boiled oil made by the old process at a high temperature gave distinctly lower figures on account of the effects of the high heat upon the oil.

In order to facilitate comparison between the Hubl and the bromine figures of the oils examined, the amount of bromine equivolent to the iodine absorbed as expressed by the Hubl figure has been calculated, and by dividing this result by the Bromine Addition Figure a figure was obtained for each oil which is intended to express, by the amount it exceeds 1.000, the amount of substitution of iodine which has gone on in the Hubl iodine absorption. For example, if the figure obtained for an oil by the calculation described is found to be 1.075, it indicates that the Hubl figure is in that case 7.5 per cent higher that the true iodine figure which should express the iodine absorption by addition.

The Hubl figures of a number of the oils received last were not determined, because it did not appear that the determinations would add any information to that given more fully by the bromine figures.

It is not believed that the Bromine Addition Figure is sensibly affected by the length of time that the oil is allowed to remain in contact with bromine, but the Bromine Substitution Figure probably is. The effect of the difference between five minutes' and thirty minutes' contact does not appear, however, to be marked, unless the substitution figure is very high, as in the case of pure rosin or turpentine. The results reported were obtained by or about fifteen minutes' contact.

In carrying out either the Hubl or the bromine process upon oils, it is necessary that an excess of iodine or bromine should be used amounting to as much as the oil absorbs. Many iodine figures on record are too low because this precaution was not attended to.

It is believed that more information is to be obtained as to the character of a sample of linseed oil by determining the bromine figures than by any other single test. In the case of an oil of unknown character, it would in most cases be advisable to apply this test first to it.

3. The Percentage of Unsaponifiable Organic Matter.

Linseed oil, being composed almost entirely of fatty matter of the ordinary type, compounds of fatty acids with glycerin, gives only a small percentage of material which cannot be saponified. The amount to be found in raw linseed oil has been investigated by Thompson and Ballantyne (J. Soc. Chem. Ind. 1891, 10, 336), who find amounts varying from 1.09 to 1.28 per cent in oil from various sources, and by Rowland Williams (J. Soc. Chem. Ind. 1898, 17, 305), who finds that it varies from 0.8 to 1.3 per cent. Williams, loc. cit., has also determined the amount of unsaponifiable matter in boiled oil, and finds that the amount is nearly twice as great as in raw oil, his figures for boiled oil being 1.3 to 2.3 per cent; being usually about 2 per cent. Williams regards any oil with a percentage of unsaponifiable higher than 2.5 as adulterated. His statements refer to oil which has been boiled at a high temperature, and the boiled oils for sale in New York State are apparently all made at too low a temperature to cause any increase in the amount of unsaponifiable matter contained, with the exception of the oil in the drier. In view of these facts, 2.5 per cent would be a reasonable limit to the amount of unsaponifiable matter in linseed oil. This is so well established that it was not thought advisable to make this determination upon the pure oils examined.

It may be noted that in case an oil is found to contain unsaponifiable matter in excessive amount, the evidence which can be furnished the prosecution may be made of the most conclusive charac-

ter, for the adulterant can be actually separated from the genuine linseed oil and exhibited, whereas, in the case of some other adulterants, the evidence, though it may be conclusive, is of a character requiring more demonstration to one unfamiliar with the scientific examination of oils. The adulterants whose presence can in this way be demonstrated by actual separation are mineral oil and usually rosin oil. Benzine and turpentine, although unsaponifiable, are not found with the unsaponifiable matter, as, from the nature of the methods of analysis, only materials that are practically nonvolatile are counted as unsaponifiable. They are easily separated and determined, however, as volatile oil.

There are several methods for determining the percentage of unsaponifiable material, proposed by different experimenters. Some treat the oil with alcoholic or aqueous solution of potash or soda, evaporate off the alcohol or water, and treat the dried soap with petroleum, ether or chloroform to dissolve the unsaponifiable portion. Other experimenters, after saponifying the soap with alcoholic solution of potash and evaporating off the alcohol, dissolve the resulting soap in water and agitate the solution with ether several times to remove from the soap solution the unsaponifiable matter which it holds in suspension.

A method which can with safety be recommended for determining unsaponifiable matter in linseed oil is substantially that described in Allen, Comm. Org. Anal., 3d ed., Vol. 2, Part 1, p. 112. A quantity of oil varying from 1 to 10 grams, depending upon the amount of unsaponifiable matter present, is boiled for two hours, with frequent shaking, with excess of alcoholic solution of caustic potash, in a flask provided with a return condenser. The alcohol is then distilled off until only a small quantity remains. The soap is then dissolved in water, using 75 to 100 c. c. for the purpose, transferred to a tapped separator, and 50 c. c. of ether added. The liquids are then mixed by shaking and allowed to settle. The aqueous liquid is then drawn off, the ethereal layer washed with a few c. c. of water, to which a little caustic potash has been added, and poured into a tarred flask. The soap solution

is then returned to the separator and extracted with another 50 c. c. of ether in the same way. The combined ethereal solutions are evaporated on the water bath, and when the ether has been completely removed the flask now containing the unsaponifiable matter is weighed. If the percentage of unsaponifiable matter found is large, it may be advisable to repeat the process of saponification and extraction upon the unsaponifiable matter, in order to be quite certain that no unsaponifiable oil has escaped the action of the alkali.

The mineral oil may be separated from the rosin oil in the unsaponifiable material found in the saponification process by the method suggested by the author in the Jour. Amer. Chem. Soc., 16, 385.

Fifty c. c. of nitric acid of 1.2 sp. gr. are heated to boiling in a flask of 700 c. c. capacity. The source of heat is removed, and five grams of the oil to be analyzed added. The flask is then heated on the water bath, with frequent shaking, for fifteen to twenty minutes, and about 400 c. c. of cold water added. After the liquid has become entirely cold, 50 c. c. of petroleum ether are added and the flask is agitated. The oil which remains unacted upon dissolves in the ether, while the resin remains in suspension. The liquid is poured into a tapped separator, leaving the lumps of solid resin as far as possible behind in the flask. After settling, the aqueous liquid is drawn off and the ethereal layer poured into a tarred flask. Another portion of petroleum ether is added to the resin remaining in the flask, and allowed to act upon it for about ten minutes, when it is added to that in the tarred flask. After distilling off the ether, the oil is weighed. Mineral oils lose about ten per cent in this way, and hence the weight of oil found must be divided by 0.9 in order to find the amount present in the sample analyzed.

Allen found mineral oils to lose ten to twelve per cent on treatment with nitric acid. (Pharm. Jour., 3 series, 11, 266.)

Rosin oil, though principally composed of hydrocarbons, may contain some unchanged rosin which is saponifiable, and conse-

quently, in case rosin oil is present, the amount of unsaponifiable matter which it furnishes is less than the total amount of rosin oil present. The proportion between that found and the amount present will vary according to the way in which the oil was manufactured, and its consequent contents in unchanged rosin. Ordinarily, the amount of saponifiable matter found due to rosin oil is likely to be about nine-tenths of that present.

The amount of unsaponifiable matter found in the other animal and vegetable oils used as linseed oil adulterants is approximately the same as that found in linseed oil itself; hence the process does not furnish any clue to corn, cottonseed, or menhaden oils, if they are present.

Petroleum oils may be used in adulterating linseed oil, which are just on the border line between volatile and practically non-volatile oils. Such oil as, for example, kerosene, would partly distil off with the alcohol in removing it after saponification, while the rest of it would remain to be extracted with ether from the aqueous soap solution, and be weighed as unsaponifiable matter. It might easily happen in such a case that the proportion of the partly volatile oil, which would be obtained by distillation with steam in the determination of volatile oil, would be a different one from the proportion removed from the saponified oil in distilling off the alcohol in the determination of unsaponifiable matters, and that the sum of the "volatile oil" and of the "unsaponifiable matter" would be more or less than the true total amount of adulterant added. In such a case, it would be advisable to use for the determination of unsaponifiable matter a portion of the residue from the determination of volatile oil.

4. THE AMOUNT OF ALKALI REQUIRED TO CONVERT THE OIL INTO SOAP. KOETTSTORFER FIGURE.

This determination serves in the analysis of linseed oil as an indication of the presence or absence of unsaponifiable matter, whether volatile or not. Its indications are not as valuable for this purpose as an actual determination of the unsaponifiable matter itself, but

they are more readily obtained. The determination is made by the well-known Koettstorfer process. About 2.5 grams of the oil is weighed into a flask, 25 c. c. of half-normal alcoholic solution of caustic potash added, and the liquid boiled on the water bath with a return condenser, with frequent shaking, for about two hours. The liquid in the flask is then titrated with half-normal hydrochloric acid, using phenolphthalein as indicator. Twenty-five c. c. of the same alcoholic caustic potash is titrated at the same time, and the difference between the two titrations gives the alkali used in saponifying the oil, and when calculated in milligrams of potassium hydroxide to a gram of oil, it is called the "Koettstorfer Figure."

The Koettstorfer Figure of raw linseed oil is given by Benedikt from 187.6 to 195.2, and by Allen from 187.4 to 195.2. Benedikt's figures for boiled are from 180 to 190, and Allen's figure, calculated from his "Saponification Equivalent," is 188. Benedikt's figures are on the authority of Filsinger, Chem. Zeit., 1894, 18, 1867, and evidently apply to old-fashioned, strongly heated boiled oil. Both the exposure to high heat and the introduction of manganese and lead soaps of linseed oil in the drier tend to reduce the Koettstorfer figure. Of the two, exposure to high heat for a long time, as in the old-fashioned boiling process, reduces it far more than the introduction of the small percentage of lead and manganese soaps as used in practice. The boiled oils now for sale in this State have, as will be seen from the table, almost as high figures as the raw oils. It may fairly be demanded of a raw oil that its figure shall not be lower than 187, and of a boiled oil not lower than 186.

A low figure indicates the presence of mineral oil, having a figure below 10; of rosin oil, having a figure below 20, or of benzine or turpentine, of both of which the figures are practically 0.0. Pure hydrocarbons give a Koettstorfer figure of 0.0, but mineral oils usually contain traces either of mineral acid from the refining process, or of organic acids from oxidation by the air, and rosin oils contain some unchanged rosin, which acounts for the Koettstorfer figures.

5. THE AMOUNT OF ALKALI REQUIRED TO NEUTRALIZE THE FREE ACIDS IN THE OIL. ACID FIGURE.

Perfectly pure linseed oil contains only a very small percentage of free acids, while rosin is composed principally of free acids, and rosin oil usually contains a notable proportion of free rosin. Therefore, the free acids in an oil which contains rosin will neutralize a larger proportion of alkali than those from pure linseed oil. On keeping, the amount of free acid is likely to increase somewhat. The free acid found may be partly due to mineral acid used in refining the oil. The amount of mineral acid may be separately determined by boiling for some time a weighed portion of the oil with water, cooling the mixture, adding neutral potassium iodide and iodate, and titrating the liberated iodine with standard sodium thiosulphate. After deducting from the total percentage of potash required to neutralize the total free acid the percentage required for the mineral acid, the percentage required by the free organic acid is found, which, in the case of linseed oil, are almost certain to be either the normal fatty acids from the linseed oils or a combination of these with resin acids.

The method of determining free acids is to weigh 5 to 10 grams of the oil in a flask, add about 50 c. c. of alcohol, which is neutral to phenolphthalein, heat on the water bath till the alcohol boils, shake well and titrate with half-normal alkali. The results of the titration are expressed in milligrams of potassium hydroxide required per gram of oil, and the result is called the "Acid Figure."

Benedikt gives as the limits observed by Nördlinger, in examining ten samples of linseed oil acidities, from .41 to 4.19 per cent of oleic acid, corresponding to acid figures from .9 to 8.3. Mills allows a maximum figure of 10.0. As will be seen from the figures contained in the table, raw linseed oil will usually give an acid figure in the neighborhood of 3.0. Oil No. 1, though pure, has 7.1, due, no doubt, to the fact that it is several years old. The figures of boiled oil are slightly higher, due, probably, to the production of a small quantity of some acid body by the action

of heat on the oil. The figure of boiled oil will usually be below 5, but is more uncertain than that of raw oil. A figure higher than 10.0 will almost certainly be found due to the presence of rosin. The acid figure of rosin is variously given by Benedikt, Williams, and Schmidt & Erban, from 145.5 to 179.2. Samples examined by the author (Jour. Amer. Chem. Soc., 16, 275) gave figures from 155.7 to 168.5. Fortunately, rosin is also indicated by a high Bromine Substitution Figure and a low Bromine Addition Figure, and, if all three point to rosin, it is probably there, but the safest course is the actual isolation of the rosin by Twitchell's or Gladding's process.

6. THE PERCENTAGE OF INSOLUBLE BROMINE DERIVATIVES.

This determination is proposed by Hehner and Mitchell (Analyst Dec., 1898, Vol. 23, p. 310). It depends upon the fact that linseed oil gives, when dissolved in ether and treated with bromine, compounds of glycerides and bromine, which are insoluble in the ether, while oil containing glycerides of oleic acid only, and even semi-drying oils like cottonseed and corn oils, give soluble compounds. Hehner and Mitchell obtain the following percentages of insoluble bromine compounds from different oils:

Oil.	Per cent of insoluble bromide compounds.
Linseed oil	23.86 to 25.0
Poppy oil	0.0
Corn oil	0.0
Cottonseed oil	0.0
Olive oil	0.0
Almond oil	0.0
Rapeseed oil	0.0
Whale oil	25.0
Code oil	35.5
Codliver oil	42.9
Shark oil	22.0

The process which seems to be a valuable one in detecting adulterations of linseed oil with other seed oils, was not published until

late in the progress of this investigation, and it was impossible to carry on all the experiments with it that it deserves. It has seemed inadvisable, therefore, to present in full the results obtained. Two samples of raw linseed, six samples of boiled linseed, two of corn, and one of cottonseed oil, gave results agreeing substantially with those of Hehner and Mitchell. Two samples of mineral oil, one light and one heavy, one sample of rosin oil, and one sample of turpentine failed to give any precipitate of insoluble bromine derivatives.

7. THE PERCENTAGE OF VOLATILE OIL.

The presence of even a small percentage of turpentine in linseed oil is distinctly indicated by the odor of the oil when placed in a vessel which it about half fills, the vessel closed, and heated in boiling water for a few minutes. The smell of turpentine will then be noticed on opening the vessel. Benzine is indicated, though not quite so distinctly, in the same way.

To determine the amount present, a convenient quantity, say 300 grams, is heated by means of a paraffin or air bath to about 130° C., in a flask provided with an outlet tube for vapors, an inlet tube reaching nearly to the bottom of the vessel, and a thermometer inserted into the oil. When the oil has reached the desired temperature a current of dry steam is passed through the oil and the vapors condensed in a Liebig condenser. The distillate will separate into a lower layer of water and an upper layer of volatile oil, which is separated and measured or weighed. The aqueous part of the distillate will inevitably carry with it a small quantity of volatile oil, but the quantity is very small. The amount of turpentine either dissolved or permanently held in suspension by water was found in one experiment made by the author (Jour. Amer. Chem. Soc. 16, 273) to amount to 0.300 grams in 90 c. c. of water.

A separation of the benzine and turpentine in the volatile oil found is best effected by the method of Burton (Amer. Chem. J. 12, 102), which depends upon the difference between the action of fuming nitric acid upon benzine and upon turpentine, the former remaining practically unattacked, while the latter is strongly acted

upon and converted into bodies soluble in hot water. The method may be described as follows: A measured quantity of the mixture to be separated is allowed to drop slowly into 300 c. c. of fuming nitric acid contained in a flask of 750 c. c. capacity, provided with a return condenser and immersed in cold water. A violent reaction takes place as each drop of oil strikes the acid, and the flask should be shaken occasionally. When all the oil has been added the flask is allowed to stand till all action is over. The contents of the flask are then poured into a separating funnel and treated with successive portions of hot water; the products of the action of the acid on the turpentine are in this way removed, leaving the petroleum oil to be separated and measured.

The Maumene Test.

When oils are mixed with concentrated sulphuric acid the mixture becomes hot, and the rise of temperature varies with the nature of the oil. The chemistry of the process is but slightly understood. Nondrying oils do not give as great a rise as drying oils, and, consequently, linseed oil gives a greater rise than any of its adulterants, except, unfortunately, menhaden oil. The behavior with sulphuric acid is similar to the behavior with bromine and iodine, so that no more information is gained from the rise in temperature than is obtained by determining the percentage of halogen absorbed, except in the case of adulteration with menhaden oil.

The test which is known as Maumené's test and which is fully described in Benedikt Analyse der Fette, and in Allen, Comm. Org. Anal., Vol. 2, is carried out by mixing 50 c. c. of the oil to be examined with 10 c. c. of strong sulphuric acid. The reaction with linseed oil and with some other oils is so violent that the oil must be diluted with some more inert oil, or the mixture will froth over. The rise in temperature is observed by a thermometer used to stir the mixture, and the vessel in which the experiment is carried on is protected from rapid cooling by setting it inside another larger vessel, usually with cotton wool between. The amount of heat abstracted by the vessel itself depends upon its mass and material, and the amount of loss by radiation is dependent upon a variety of circumstances. Consequently, the results obtained by

different observers with different apparatus have varied with the same oil, and each apparatus must be standardized by the observer by testing with a number of oils of known purity, or else by adopting the suggestion of Thomson and Ballantyne (J. Soc. Chem. Ind. 1891, 10, 233), and expressing the results in terms of rise of temperature produced by substituting an equal volume of water for oil, the results obtained with water being taken as 100. As stated above, the Maumené figure is usually higher the higher the halogen absorption. In the case of menhaden oil, however, and perhaps other fish oils, the Maumené figure is higher than would correspond with its iodine or bromine absorption. A sample having a bromine addition figure of 95, as against linseed oil, which would have a figure usually about 102, would give a Maumené figure higher than that of the linseed oil. Thomson and Ballantyne find that the specific rise of temperature of four samples of linseed oil, which they examined, varied from 270 to 349, while the corresponding figure for a sample of menhaden oil was 306. Allen found the rise of temperature with sulphuric acid to be 104 to 111 in the case of linseed oil, and 126 in the case of menhaden oil.

It will be seen from these facts that if an oil is found to give a distinctly lower bromine addition figure, and, at the same time a Maumené figure distinctly higher than specimens of pure linseed oil tested in the same apparatus, very strong evidence of the presence of fish oil is at hand. It is advisible before testing a sample of oil in this way to remove from the oil all impurities, as far as possible. Volatile oil is removed with comparative ease. Free rosin can be largely removed by repeated treatment with moderately strong alcohol, and subsequent removal of any alcohol that may remain dissolved in the oil by treatment with water and settling, keeping the vessel hot. Unsaponifiable matter and soaps cannot be easily removed, but in extremely important cases it might be advisable to prepare a quantity of the fatty acids of the sample to be examined by saponifying and then acidifying the oil, after freeing it from rosin, as far as possible. Volatile oil could be removed during the saponification. This sample of fatty acids could then be tested under the same conditions as the fatty acids prepared from samples of pure linseed oil.

LIVACHE'S TEST.

The power possessed by linseed oil in greater measure than by any other oil to absorb oxygen from the air, and, consequently, to increase in weight, is measured by Livache's test, Compt. rend. 1895, 120, 842. In order to hasten the absorption of oxygen a weighed quantity of the oil is spread out in a thin film on a watch-glass, and mixed with finely divided precipitated metallic lead. At the end of each period of 12 or 24 hours the mixture is weighed, and the increase in weight noted. The amount of oxygen absorbed in this way by oils is roughly proportional to the absorption of bromine and iodine, except in the case of fish oils. Menhaden oil, though having a power to absorb bromine or iodine but slightly inferior to that of linseed oil, falls very short in practical drying properties, and as Livache's test comes nearer than any other to an actual determination of the real drying power of an oil, menhaden oil is indicated by a percentage of oxygen that is proportionally very much lower than that of linseed oil, than the bromine or iodine figures of the sample. Details of the process will be found in Benedikt and in Allen.

Livache found linseed oil to gain 14.3 per cent of its weight in two days, while Jean (Monit. Scient. 15, 891) found menhaden oil to gain only 5.454 per cent in three days.

Thus if an oil having bromine addition figure (after allowing for the effect of other impurities found), that is, only slightly lower than that of linseed oil, strong proof is had of the presence of menhaden oil.

With regard to other adulterants of linseed oil the test does not furnish information at all comparable in value with that obtained by determining the bromine figures.

INDEX OF REFRACTION.

With regard to the index of refraction the difference between the figures of linseed oil and of its adulterants is comparatively small, and much less work has been done in this direction than in others. The following figures are taken from several authorities:

Oil.	Refractive index.
Linseed oil	1.484 to 1.488 at 15° C.
Cottonseed oil	1.475 at 15° C.
Rosin oil	1.535 to 1.549 at 18° C.
Mineral oil	1.438 to 1.507
Turpentine oil	1.464 to 1.474
Rosin (colophony)	1.548
Corn oil	1.478 at 20°

THE ACTION ON POLARIZED LIGHT.

The use of the polariscope is very limited in testing linseed oil. Little has been done with it, and its value in this connection seems to be confined to the detection of rosin oil, which is dextro-rotary. Valenta finds its rotary power to be 30°–40°, and Demski and Morawski find it to be 50°. American oil of turpentine deviates polarized light to the right, while the French oil of turpentine deviates to the left. Mineral oils have no rotatory power, or only a slight one, and, according to Bishop, vegetable oils, with the exception of sesame oil, rotate to the left. Therefore, a right-handed rotation in a sample of linseed oil is indicative of rosin oil.

THE BEST TESTS TO APPLY IN ANALYZING LINSEED OILS.

In examining linseed oil for adulteration it will usually be found advisable to make the following determinations:

1. Determine the specific gravity at 15°.5 C., water at the same temperature being taken as 1.000. This should be between .931 and .937 for raw oil, and between .931 and .950 for boiled oil.

2. Determine the bromine addition figure and the bromine substitution figure. The former should be between 100 and 110 and the latter should not be higher than 5, though it may rarely, in a pure oil, be as high as 7, probably from the presence of an unusual amount of nonfatty matter extracted with the oil from the seed. The figures to be expected are the same for raw oil and boiled oil as now made.

3. Test for volatile oil by the odor and determine the amount present by distillation with steam. There should be none.

4. Determine the amount of nonvolatile unsaponifiable material. There should be less than 2.5 per cent in either raw or boiled oil.

5. Determine the acid figure. It should be less than 5 in either

raw or boiled oil, but figures as high as 7 may indicate that the oil is old rather than adulterated, and a still higher figure may prove to be due to the presence of mineral acid from refining.

6. Determine the Koettstorfer figure. This should not be less than 187 in the case of raw oil, nor less than 186 in the case of boiled oil, and in neither case should be higher than 196.

7. If the appearance, odor, etc., of an oil point to the presence of fish oil, apply Maumené's and Livache's tests.

Adulteration will usually be indicated by more than one test, and if abnormal figures are obtained by one process pointing to a certain kind of adulteration, while others, which would also be expected to be abnormal, are not so, it is evident that some new adulterant is to be sought for, or that the oil has, perhaps, been made by some unusual process.

DETECTION AND DETERMINATION OF THE SEVERAL ADULTERANTS.

1. Nonvolatile mineral oil. Indicated by low bromine absorption, low bromine addition figure, low Koettstorfer figure, and low specific gravity. Separated and weighed together with rosin oil as unsaponifiable matter, and separated from rosin oil by nitric acid.

2. Benzine. Indicated by odor, low specific gravity, low Koettstorfer and bromine addition figures, and low bromine absorption. Separated and weighed or measured together with turpentine, as volatile oil, by distillation with steam, and separated from turpentine with fuming nitric acid.

3 Turpentine. Indicated by odor, low specific gravity, low Koettstorfer figure, and high bromine absorption, bromine addition figure and bromine substitution figure. Separated and weighed together with benzine as volatile oil by distillation with steam, and determined by difference, after treating the volatile oil with fuming nitric acid and hot water.

4. Rosin oil. Indicated by high specific gravity, low Koettstorfer figure, often high acid figure, low bromine absorption and bromine addition figure, and high bromine substitution figure. Separated and weighed together with nonvolatile mineral oil as unsaponifiable matter, and determined by difference, after treating the mixture with nitric acid.

5. Rosin. Indicated by high specific gravity, high bromine absorption, low bromine addition figure, high bromine substitution figure, and when in the free state by high acid figure. Separated and weighed or titrated by Twitchell's process, J. Soc. Chem. Ind. 1891, 10, 804. It is carried out by treating the mixed fatty and rosin acids obtained by acidifying the soap solution after extraction with ether in the determination of unsaponifiable matter, with hydrochloric gas in absolute alcohol solution. By this treatment the fatty acids are converted into ethyl esters, while the rosin acids are not. The products of the reaction are boiled with water, the mixed fatty acid esters and rosin separated and dissolved in naphtha. From this solution the rosin is extracted by potassium hydrate solution. The rosin soap solution is treated with acid and the liberated rosin weighed. For full details Allen's Comm. Org. Anal. (3d ed.) should be consulted.

Gladding's method, Amer. Chem. J. 3, 416, formerly much used for the determination of rosin, depends upon the solubility of silver resinate in ether, while the silver salts of fatty acids are soluble.

6. Menhaden oil. Indicated by a bromine addition figure slightly lower than that of linseed oil, but a higher Maumené figure and a very much lower figure by Livache's test. Indicated also by characteristic taste and odor.

7. Corn and cottonseed oils. Indicated by low specific gravity, low bromine absorption and low bromine addition figure.

Table showing the effects of temperature upon the specific gravity of linseed oil. In all cases water at 15.5° C. taken as unity.

OIL.	Sample number.	Sp. gr. 15.5 C.	Sp. gr. 28 C.	Sp. gr. 100 C.	Change for 1 C. 15.5 — 28 C.	Change for 1 C. 28 — 100 C.	Change for 1 C. 15.5 — 100 C.
American raw linseed	52	.9336	.9255	.8736	.000650	.000721	.000711
Raw Calcutta linseed	90	.9328	.9239	.....	.000698	.....	.....
Raw American linseed	92	.9336	.9255	.....	.000650	.....	.....
Raw American linseed	95	.9345	.9263	.....	.000656	.....	.....
Boiled American linseed	88	.9335	.9297	.....	.000707	.....	.....
Boiled American linseed	94	.9375	.9293	.....	.000653	.....	.....
Raw American linseed	58	.9327	..	.8732	..	.....	.000704
Raw American linseed	73	9332	.9245	.8731	.000693	.000714	.000711
Boiled American linseed	72	.9336	.9258	.8735	.000625	.000726	.000714
Menhaden	71	.9316	.9235	.8712	.000646	.....	.000716

A TABLE SHOWING THE CORRECTION FOR TEMPERATURE to be added or subtracted from the readings of a glass hydrometer, correct at 60° F. (15°.5 C.) immersed in linseed oil, for each degree from 40° F. to 85° F.

Calculated from the results obtained in determining the specific gravity of samples, Nos. 88, 90, 92, 94 and 95, by the following formula.

Let a = weight of oil displaced by glass plummet at 15°.5 C., let b = weight of oil displaced by glass plummet at 28°.0 C., let c = weight of water displaced by glass plummet at 15°.5 C., let d = difference in apparent gravity by hydrometer for 1°.

$$\frac{\frac{a - b}{c}}{28 - 15.5} = d$$

By substituting 82°.4 F. and 60° F. for 28° C. in the formula the correction will be found for 1° F.

Correction for 1° Fahr. = .000361.

Correction for 1° C. = .000650.

Thermometer reading	Subtract	Thermometer reading	Subtract	Therm meter reading	Add	Thermometer reading	Add
40 Fahr.	.0072	51 Fahr.	.0032	61 Fahr.	.0004	74 Fahr.	.0051
41 Fahr.	.0069	52 Fahr.	.0029	62 Fahr.	.0007	75 Fahr.	.0054
42 Fahr.	.0065	53 Fahr.	.0025	63 Fahr.	.0011	76 Fahr.	.0058
43 Fahr	.0061	54 Fahr	.0022	64 Fahr.	.0014	77 Fahr.	0061
44 Fahr.	.0058	55 Fahr.	.0018	65 Fahr.	.0018	78 Fahr.	.0065
45 Fahr.	.0054	56 Fahr.	.0014	66 Fahr.	.0022	79 Fahr.	.0069
46 Fahr.	.0051	57 Fahr.	.0011	67 Fahr.	.0025	80 Fahr.	.0072
47 Fahr	.0047	58 Fahr.	.0007	68 Fahr.	.0029	81 Fahr	.0076
48 Fahr	.0043	59 Fahr.	.0004	69 Fahr.	.0032	82 Fahr.	.0079
49 Fahr.	.0040	60 Fahr.	.0000	70 Fahr.	.0036	83 Fahr.	.0083
50 Fahr.	.0036	.....	.....	71 Fahr.	.0040	84 Fahr.	.0087
.....	.....	.....	.....	72 Fahr.	.0043	85 Fahr.	.0090
.....	.....	.....	.....	73 Fahr.	.0047	.....	.....

TABLE OF THE RESULTS OBTAINED UPON THE OILS EXAMINED.

RAW LINSEED OILS KNOWN TO BE PURE.

Number.	FROM WHOM OBTAINED.	Sp. gr. at 150.5 C.	Koettstorfer figure.	Acid figure.	Hübl figure.	Bromine calculated from Hübl.	Per cent. of bromine absorbed.	Bromine addition figure.	Bromine substitution figure.	Bromine from Hübl div. by br. add. fig.	Per cent. unsaponifiable.	Per cent. volatile oil.	Remarks.
1	A. H. Sabin	.9340	187.9	7.1	166.9	105.2	98.4	95 4	1.5	1.103	.....	.....	Sample several years old.
2	A. H. Sabin	.9322	190.7	.7	157.3	99.1	93 2	92.0	3 6	1.000	.....	.....	Old sample Refined specially by Prof. A. H. Sabin.
52	John Carle & Sons	.9336	192 4	2.6	184.2	116.1	116.1	109.6	3.4	1.0 9	.....	.....	Unfiltered Calcutta oil.
89	Dean Linseed Oil Co	.9322	191.1	1.1	178.8	112.7	.....	.....	.....	.....	.....	.....	
90	Dean Linseed Oil Co.	.9326	191.1	1.0	178.6	112 6	108.5	102 1	3.2	1.102	.....	.....	Same as above but filtered.
92	Dean Linseed Oil Co.	.9336	188.5	1.0	185.9	1 7 2	113.2	101.2	2.0	1.072	.....	.....	American oil.
95	National Lead Co	.9345	190.0	1.4	186.3	117 0	1.2.2	106.5	2.9	1.098	.....	.....	
96	National Lead Co	.....	189.2	1.3	184.8	116.5	.....	.....	.....	.....	.....	.....	Same as previous oil but unfiltered
97	National Lead Co	.9340	188.7	21 9	184.8	1 6.5	.....	.....	.....	.....	.....	.....	Refined with sulphuric acid.
140	Kellogs & Miller	.9337	192.5	3.7	.....	....	101.5	99.9	2.3	.....	.....	.....	
151	Campbell & Thayer	.9340	192.0	1 3	.....	.....	115.1	109.5	2 8	.....	.....	.....	
153	Cleveland Linseed Oil Co.	.9327	191.3	2 1	.....	.....	114.6	109 4	2.6	.....	.83	.....	
	Averages	.9333	190.4	3.7	173 6	112.5	109.1	103.7	2 7	1.072	.....	.....	

RAW LINSEED OILS, BELIEVED FROM ANALYSIS TO BE PURE.

61	F. J. H. Kracke	.9336	189.8	2.1	172.2	108.5	115.3	105.5	4.9	1.028	.....	.....
63	F. J. H. Kracke	.9326	189 3	2.1	168.6	101.3	110 4	106.4	2.0	.999	.....	.....
73	William McDonagh	.9332	190.6	3.9	180.6	1 3.8	111.1	105.9	2.6	1.074	.....	.....
82	Pool & Son	.9321	188.3	1.8	182.4	115.0	112.2	104.2	4.0	1.103	.....	.....
83	J. H. Tieman	.9334	190.5	1.1	183.6	115.7	116.0	107.2	4.4	1.078	.....	.....
84	Askin & Co.	.9331	187.7	1.7	180.0	113 5	113.5	100.7	6.4	1.127	.....	.....
86	T. J. Pre ton	.9337	188.4	2.1	181.8	114.6	114.1	108.5	2.9	1.046	.....	.....
91	C A. Woolsey Paint Co.	.9324	192.0	2.4	174.5	110.0	109.0	105.2	1.9	1.015	.....	.....
107	Nairn Linoleum Co	.9335	191.7	1 7	.....	.....	107.3	100.9	3.2	.....	.....	.....
	Averages	.9330	189 8	2.1	177.9	112.1	112.1	104.9	3.5	1.062	.....	.....

BOILED LINSEED OILS KNOWN TO BE PURE.

88	Dean Linseed Oil Co	.9385	191.1	4.2	180.4	113.7	106.0	100.8	2.6	1.126	.....	.....
81	National Lead Co	.9375	19 .3	2.8	183 3	115.5	110 8	105.8	2.5	1.091	.....	.....
140	Kellogs & Miller	.9388	187.5	5.1	.....	.....	105.4	101 2	2.1	.....	.....	.....
52	Campbell & Thayer	.9474	192.1	5.7	.....	.....	110.0	103.2	3 4	.....	1.12	.....
160	Hauenstein & Co	.9383	92.2	5.3	.....	.....	109.8	105.2	2.3	.....	.....	.....
162	Mann Bros. & Co	9355	190.6	3.5	.....	.....	118.6	103.0	5 3	.....	.....	.....
163	Spencer Kell gg	.9379	191.8	6.4	.....	.....	109.2	103.8	2.7	.....	.....	.....
165	A. B Gibbs	9444	190.7	4.7	.....	.....	110.8	101.0	4.9	.....	.....	.....
	Averages	.9398	190.9	4.7	....		109.4	103.0	3.2	.....	.....	.....

BOILED LINSEED OILS, BELIEVED FROM ANALYSIS TO BE PURE.

101	Askin & Co	.9363	191.5	4.1	178.0	112 2	110.3	103.5	3.1	1.084	.....	.....
113	Charles Fleury	.9359	192.1	7 0	173.2	10 .2	106 1	101 5	2.3	1.075	.....	.....
114	E. G. Atwood	9362	190.2	3.4	176.6	111.3	106.0	101.4	2 3	1 097	.....	.....
115	Abraham Bros	.9367	193.8	3.1	179.7	113.3	111.6	108 0	1.8	1.030	.....	.....
116	F. Schiller	.9359	189 2	3 3	182 9	115.3	111.9	104.7	3.6	1.012	.....	.....
118	A. Levinsky	.9368	192.6	3.5	175.0	110.3	112.8	106 4	3 2	1.036	.....	.....
119	James Lawler	.9394	194.6	5.2	174.4	109.9	110.4	103.4	3.5	1.062	.....	.....
120	D. Lubelsky	.9366	193.7	3.9	177.6	111 3	111 4	105.2	3.1	1.057	.....	.....
127	W. N. Nevins	.9397	193.3	3.9	.....	.....	116 4	107 2	4.6	.....	.....	.....
139	John Geddes	.9345	190.8	2.1	.....	.....	114.9	107.3	3 8	.....	.....	.....
	Averages	.9368	191.9	4.0	177.2	111.6	111 2	104.9	3.2	1.057	.....	.....

BOILED LINSEED OILS NOT MADE ENTIRELY FROM LINSEED OIL, LEAD AND MANGANESE.

72	William McDonagh	.9336	184.2	11.1	165.1	104.0	105.3	94.7	5.3	1.099	3.84	.....	
85	J. H. Tieman	.9350	182.2	8.4	168 5	106.2	112.0	92.6	9.7	1.147	6.89	.....	
117	Samuel Sendacz	.9247	116.4	16.6	105.2	66.3	81.9	51.4	16.7	1.292	18.6	9.04	Benzine.
124	D. S. Brome	.9344	176.9	7.0	.....	.....	100.0	91.0	4.5	.....	7.84	.....	
125	John Gutendorf	.9247	173.0	3.2	.....	.....	108.0	97 0	5 5	.....	8.35	.....	
126	P H. Reardon	.9321	174.8	3 2	.....	.....	26.4	111 2	7.6	.....	.....	8.87	Turpentine.
128	Ilsley, Doubleday & Co	.9332	175.7	6.3	.....	.....	109.1	94.5	7.3	.....	8.18	..	
129	L. Kotzen	.9337	165.4	10.5	.....	.....	06.1	87 3	9.4	.....	7.83	4.39	Benzine.
130	Max Hurwitz	.9347	155.3	8.6	.....	..	101.1	84.9	8.0	.....	5.72	.....	
154	.....	.9351	186.0	6.1	.....	.....	115.2	104.8	5.2	.....	4.00	.....	
161	.....	.9360	185.2	5.4	.....	.....	109.3	99.9	4.7	.....	4.03	.....	

ADULTERANTS.

Mineral Oil.

54	Thompson & Bedford	.8436	7.8	....	.....	.....	14.4	6.4	4 0	.....	.....	.....	"Venango" Neutral Oil.

TABLE OF THE RESULTS OBTAINED UPON THE OILS EXAMINED — *Concluded.*

Rosin Oil.

Number.	FROM WHOM OBTAINED.	Sp. gr. at 150.5 C.	Koettstorfer figure	Acid figure.	Hübl figure.	Bromine calculated from Hübl.	Per cent of bromine absorbed.	Bromine addition figure.	Bromine substitution figure.	Bromine from Hübl div. by br. add. figure.	Per cent. unsaponifiable.	Per cent. volatile oil.	Remarks.
42	John Smith's Son	.....	.....	....	.....	.....	197.6	16.4	90 6	.....	.....	.....	Third Run Oil.
53	S. P. Shotter & Co.	.....	10 8	....	.....	.....	93.7	6.3	43.7	.....	.....	.....	Mystic Brand Lubricating Oil.
55	S. P. Shotter & Co.	.9664	34.7	17.6	73.3	46.2	101.9	8.3	46.8	5.685	.....	.....	"Boiled Java Oil." A Compound Oil.
57	S. P. Shotter & Co.	.9881	17.5	....	63.9	40.3	92.3	7.7	42.3	5.231	.....	.....	Third Run Oil.
						Menhaden Oil.							
56	Swan & Finch	.....	189.6	3.8	178 8	112.7	114.5	96.5	9 0	1.169	.....	.....	
71	Wm. R. Winn	.9316	188.4	....	170.4	107.4	107.3	92.3	7.5	1.164	.....	.....	
103	Swan & Finch	.9307	.....	....	175.4	110.6	110.1	97.9	6.1	1.129	.....	.....	
						Corn Oil.							
105	Elbert & Gardner	.9242	.....	....	.....	.....	76.2	73.8	1.2	.....	.....	.....	
106	Glucose Sugar Co.	.9233	.....	....	.....	.....	75.8	73.2	1.3	.....	.....	.....	
111	Pope Glucose Co.	.9241	.....	....	.....	.....	75.4	71.6	1.9	.....	.....	.....	
						Cottonseed Oil.							
32	.....	.....	.....	....	.....	.....	65.8	62.2	1.8	.....	.....	.....	
						Turpentine.							
143	Edward Smith & Co.	.8740	.....	....	.....	.....	266.1	166.1	50.0	.....	.....	.....	
						Benzine.							
142	Standard Oil Co.	.7410	.....	....	.....	.....	51.5	15.5	18.0	.....	.....	.....	Called Special Naphtha
146	A. H. Sabin	.7330	.....	....	.....	.....	6.3	2.7	1.8	.....	.....	.....	Turpentine substitute.
						Rosin.							
144	Potter & Co.	.....	.....	....	.....	.....	161.4	8.0	76.7	.....	.....	.....	Window Glass Rosin.
145	Potter & Co	.....	.....	....	.....	.....	135.4	5.4	65.0	.....	.....	.....	Black Rosin.

TABLE SHOWING THE ORDINARY FIGURES GIVEN BY LINSEED OIL AND ITS ADULTERANTS.

	Sp. gr. at 150.5 C.	Koettstorfer figure.	Acid figure.	Hübl figure.	Per cent. bromine absorbed.	Bromine addition figure.	Bromine substitution figure.	Special properties.
Linseed oil, raw.....	.931— .937	187.—196.	Less than 7.	170.—185.	105.—115.	100.—110.	Less than 7.	
Linseed oil, boiled ..	.932— .950	186 —196.	Less than 7.	170.—185.	105 —115	100.—110.	Less than 7.	
Mineral oil	.800 — .950	0	0	Less than 15.	Less than 20.	Less than 10.	Less than 10.	Unsaponifiable. May contain acids.
Rosin oil	.970—1.000	Less than 20.	Less than 20.	40.—60.	90 to 200.	Less than 20.	40.—100.	Largely unsaponifiable.
Menhaden oil	About .931	About 189.	Less than 10.	160.—180.	105 —115.	90.—100.	5.—10.	High Maumené and low oxygen absorption figures.
Corn oil.....	About .924	About 189.	Less than 10.	115.—125.	About 75.	About 72	About 2.	
Cottonseed oil ..	.922— .930	191.—197.	Less than 10	106.—111.	About 65.	About 62	About 2.	
Turpentine	About .873	0	0	.....	About 265.	About 165.	About 50.	Volatile with steam.
Benzine	.730— 745	0	0	....	Less than 55.	Less than 20.	Less than 20.	Volatile with steam.
Rosin	1.04—1.11	175.—195.	155.—165.	140.—160.	135.—165.	Less than 15.	65.—80.	Separated by Twitchell's process

Respectfully submitted,
PARKER C. McILHINEY.

Report of W. H. Kelly.

Hon. C. A. Wieting, *Commissioner of Agriculture:*

Dear Sir.— I respectfully submit the following report for the fiscal year ending September 30, 1899. There have been fewer outbreaks of swine and more of cattle disease reported this year than formerly. One of the former and nine of the latter have been investigated, namely, swine plague, actinomycosis, rabies, verminous bronchitis, black quarter, spinal meningitis, indigestion, poison and tuberculosis. I have also made several barn inspections, examined several hundred bob-veal calves, and answered letters, referred to me at your office, pertaining to veterinary matters.

CATTLE DISEASES.

September 30, 1899, a carload of quarantined cattle was unloaded at West Albany, in violation of the order issued by the United States Bureau of Animal Industry. On September twenty-sixth, car 15139 W. S. left East St. Louis, with quarantined cattle, consigned to B. Sheehan, Albany. The car was properly marked, according to the Bureau of Animal Industry regulations. It reached West Albany, September twenty-ninth. On account of the trouble we had with the unloading of southern cattle the previous year, the New York Central and Hudson River Railroad agent, at West Albany, would not allow these cattle to be unloaded at the same platform as other cattle. He had built a temporary platform for their unloading. After being unloaded they were driven over the public streets of Albany, also public highways, to the slaughter-house, which was also a violation of the Bureau of Animal Industry regulations, which states that "quarantined cattle must be unloaded in yards set apart for southern cattle, or

direct into the slaughter-house, and not be permitted to travel over the streets, yards, alleys, or where other cattle pass." One of these steers separated from the others and ran through several fields until it was finally shot several miles from Albany. Upon examining the cattle, a number of ticks (*Boophilus bovis*) were found upon them. On account of the lateness of the season the eggs did not hatch, consequently, we did not have any reported cases of Texas fever. The car was disinfected.

Actinomycosis.

Three cases of disease, reported to be actinomycosis, were investigated; one in town of Colonie; one in town of New Scotland, and the other in town of Castleton. Upon examining the first case, I found that the animal had had actinomycosis, but the owner, who is a veterinarian, had been treating it with iodide of potash, and it had made a good recovery. I found the second case to be an enlarged parotid lymphatic gland, which was probably due to tuberculosis. The third case was in an animal in a debilitated condition, and was practically of no value. At my suggestion, the owner had it destroyed.

Verminous Bronchitis.

One case of verminous bronchitis was investigated. This was in Sullivan county, a few miles from the place where this disease occurred last year. Prior to my visit several calves had died. The owner thought death was due to tuberculosis, but, happening to meet the man whose calves were similarly affected in the same vicinity last year, and which were examined and treated by me, under the direction of the Department, he informed him that it was probably not tuberculosis, but verminous bronchitis. He suggested that he report the case to the Department. Both medicinal and preventive treatment was prescribed. Since my visit, no other death from this disease has been reported.

BLACK QUARTER.

Several cases have been reported and investigated. The loss, in the various outbreaks, has been, ten calves, six yearlings, four two-year-olds, and one three-year-old. I have vaccinated with vaccine prepared at the United States Bureau of Animal Industry, seven calves, 30 yearlings, 20 two-year-olds, and one three-year-old, making a total of 58. In the majority of cases, the farmer thinks the disease a mysterious one, or that his cattle have been poisoned by some imaginary enemy. Such farmers do not realize the importance of carefully disinfecting all places where diseased animals have died; nor the necessity of burning or burying the carcasses, and all secretion or excretion of diseased animals. They should be buried, apart from any stream, well, marshy or flat land, and the grave covered with lime and fenced. That such people may better understand the cause, symptoms and preventive treatment, a brief account may prove of interest.

Black quarter is a disease known by the names of black leg, quarter ill and symptomatic anthrax.

When one or more cattle die very suddenly, without any apparent cause, it is usually supposed that the cause of death was anthrax or poison. This disease is usually confined to certain farms in certain localities, where it may remain for years.

As a rule, only cattle, from the time they are changed from a strictly milk diet to four years of age, become affected. Calves, when on a milk diet, and indigenous cattle over four years of age, are rarely affected. The disease is caused by a micro-organism. This disease usually runs a very rapid course, which, as a rule, ends fatally in from one to three days. Oftentimes, upon going to the field, one or more of the young animals, which were apparently healthy the preceding day, will be found dead. It is characterized by elevation of temperature, stiffness of gait, rapidly increasing swellings of the skin, which, if pressed on with the hand, gives a crackling sound. The swellings may appear in any part of the body above the knees and hocks. They are at first

painful, but very rapidly become painless. The animal appears depressed, loss of appetite and rumination ceases. There is also lameness, stiffness and a dragging of one limb. Sometimes there is groaning and colicky pains. At a post-mortem, when the skin is cut over the affected quarter, a blood-stained, frothy liquid escapes. The connective tissue contains gas. The muscles underneath the tumor are of a dirty brown or even black color. The muscles of the unaffected quarters are practically normal in appearance. In the abdominal cavity there will be found bloody fluid.

The spleen, which is on the left side, attached to the rumen or paunch, is not enlarged as in anthrax. The main differences between anthrax and black quarter may be summarized as follow:

1. Black quarter is characterized by crackling, gas-containing tumors beneath the skin. These never occur in anthrax.

2. By the above-described changes in the muscles, which always contain gas, and by the normal condition of the blood and spleen. The blood coagulates freely, while in anthrax it does not.

3. The bacillus of black quarter differs from that of anthrax. The bacillus of black quarter is anaërobic, that of anthrax aerolic.

4. Black quarter usually affects only young cattle; anthrax attacks all genera of animals at any age.

There is no medicinal treatment which can be relied upon; prophylaxis is the best treatment. It is also highly important that all manure, bedding, carcasses or any secretion from a deceased animal should be burned or buried deeply and covered with quick-lime; if this is not done, the disease is liable to appear for several years on the infected farm or in a particular locality. This is due to the spores living for years.

SUPPURATIVE CELLULITIS.

One case of this disease has been reported. Prior to my visit to a certain farm, four milch cows had died from the disease and two others were affected at the time of my visit. I instructed the owner as to the cause, prescribed treatment and asked him to re-

port any new cases, and the result of treatment. Since, I have been informed that those affected were getting better, and no new cases have developed.

INFECTIOUS MAMMITIS.

One outbreak of this disease occurred in a herd of fourteen milch cows, of which six were affected during a period of four weeks. From the specimens of milk taken from the affected cows, which were sent to Dr. V. A. Moore for a bacteriological examination, there was found the streptococcus. I informed the owner that the cause was due to a specific germ, and that it was dangerous unless washed off; therefore the milker should wash his hands, and udders of the cows in a corrosive sublimate solution (1-2000) prior to milking; also that the barn must be thoroughly disinfected.

Since my visit, the owner has not reported any new case. The affected ones improved.

TUBERCULOSIS.

Two cases of selling milk from supposed tuberculous animals were investigated. In the first instance, there was only one cow, but in the second, there were ninety-two cows, out of which thirty-nine reacted to the tuberculin test. This test was made by me under the direction of the State Board of Health, and the reacting ones were put in quarantine by that board. The temperature charts are as follow:

Tag Number.	Breed.	Sex.	Age.	Amount of injection.	Temperature Before Injection, January 26, 1899.		Temperature After Injection, January 27, 1899.									Remarks.
					6 P.M.	Time injected.	7 A.M.	9 A.M.	11 A.M.	1 P.M.	3 P.M.	5 P.M.	8 P.M.	P. M. 9.30	P. M. 11.00	
			Years.													
201		F	5	2 c.c.	102°	7 P. M.	101.6	103.2	103.6	101	102 2	102	100			Advanced pregnancy,
202		"	11	"	102 4	"	106	105.8	105.8	105	104.6	105	103.2			Advanced pregnancy.
203		"	2	"	101	"	106	106.6	105	105	105	104.3	104.4			Advanced pregnancy.
204		"	2	"	101	"	106	106	105.2	106.6	106 2	104.6	103.6			Condemned.
205		"	2	"	100	"		103.4	103.2	102.6	102.2	102.6	102 4			Advanced pregnancy.
206		"	2	"	101.2	9 "		106.2	105	104.6	105.4	105.4	105.6			Advanced pregnancy.
207		"	2	"	100.4			105.6	105	104	104.4	104	102.4			Condemned.
208		"	5	"	103 6			104	105	105.2	104.6	104.2	102 6			Condemned.
209	Gr. Hol.	"	6	"	102			102.2	102.4	100	101	100.4	101 8			
210	"	"	6	"	102.2			102	101.8	101.2	102	100.2	101.2			
211	"	"	3	"	101.6			106	107	104 6	104.6	103.6	103			Condemned.
212		"	4	"	102			103	101.8	101.4	101	101	100			
213	Gr. Dur.	"	3	"	101.2			103	102.8	103.6	103	101.6	101			Advanced pregnancy.
214	Gr. Hol.	"	4	"	102			102	102.2	102	102.4	101.6	101			
215	"	"	4	"	102			103	103	103	102 6	102.2	101.2			
216	"	"	4	"	102.4			104.8	106	104.8	103.6	103.6	101.4			Condemned.
217	"	"	9	"	101.6			103	103	102.6	102.6	101 8	101			
218	"	"	4	"	102.4			103	102.6	102.6	101 8	102	100.8			
219	"	"	8	"	102 2			105.6	105.8	106.6	105.6	104.8	103.4			Condemned.
220	"	M	2	"	102.2			104.6	104.8	104.6	103.6	102.4	101.2			Condemned.
221	"	F	2	"	102			102	101.8	101.8	101.8	100.8	101.4			
222	"	"	2	"	102.4			102.6	102	102.6	103.6	101.6	101.2			
223	"	"	2	"	103.4			108	107	105.4	104.6	103.6	105.6			Metritis.
224	"	"	2	"	103			102.6	103.6	102.4	102.4	102	101.4			
225	"	"	2	"	102			102.6	102.4	102	101.6	101 4	101.8			
226	"	"	2	"	102.4			105	105.4	105.4	104	103.8	102 6			Condemned.
227	Gr. Dur.	"	8	"	101.6			105	106	105.8	104.4	103.6	103			Condemned.
228	"	"		"	101			101 4	101.4	101.8	102.4	101.2	101.2			
229	"	"		"	100.6			103.6	102.6	102.8	100.6	102	103			Advanced pregnancy.
230	"	"		"	103			105	106.4	105	104	104.8	102.4			Condemned.
231	"	"		"	101			104.2	105.2	105	104	102.4	102			Condemned.
232	"	"		"	102			105	105.8	105	104.6	103.8	104			Condemned.
233	Gr. Jr.	"		"	101			102.4	104.8	104.4	104.6	103.4	103.6			Condemned.
234	Gr. Dur.	"		"	102			104.2	105	103.4	103.4	103	102.2			Condemned.
235	Gr. Hol.	"		"	101	9 P. M.		102.2	104	104.8	104.8	103.8	104			Condemned.
236	"	"		"	102	"		102.4	102	102.2	101.6	100.8	100			
237	Gr. Dur.	"		"	101.2			103.6	103.4	104.6	103.8	102 6	102.4			Condemned.
238	Gr. Hol.	"		"	102.4			100.4	100.6	100	101	100	100			
239	"	"		"	101.6			102.2	103	104.4	104.8	103	102.6			Condemned.
240	Gr. Dur.	"		"	101.6			102 2	102	102	101.2	102	102			
241	"	"		"	101.2			101.2	100.6	101.2	101.4	100.4	100.4			
242	Gr. Hol.	"		"	101			101	102.2	104	104.4	102.4	101.8			Condemned.
243	Gr. Jr.	"		"	101.8			103.6	103.6	104.8	104 4	104	102.4			Condemned.
244	Gr. Dur.	"	4	"	101.2			107	105.4	103.6	104.6	104.6	104.4			Condemned.
245	Gr. Hol.	"	9	"	101.2			102	103	103.8	104	101.8	100.4			Condemned.
246	"	"	4	"	102			102	102.2	101.8	101	101	100.4			
247	"	"	4	"	101			106	106 4	104.8	101	102.6	102.6			Condemned.
248	"	"	4	"	101 8			105.6	105 6	103.3	103.8	104.4	103			Condemned.
249	Gr. Dur.	"	6	"	101.8			101 8	102	101.4	101 6	101.2	100 6			
250	"	"		"	101.4			101.6	102.6	102.4	103.4	103.6	102 8			
251	"	"		"	100	7 P. M.	102.6	103	103.8	103	102.6	102	101.8	101.2		All below injected Jan. 28; temperatures Jan. 29.

Tag number.	Breed.	Sex.	Age.	Amount of Injection.	Temperature Before Injection, January 26, 1899,		Temperature after Injection, January 27, 1899.								Remarks.
					6 P. M.	Time Injected.	7 A. M.	9 A. M.	11 A. M.	1 P. M.	3 P. M.	5 P. M.	8 P. M.	P. M.	P. M.	
			Years.											9.30	11.00	
252	Gr. Hol.	F		2 c.c.	102.4	7 P. M.	103.2	104	105.8	104	103.6	102	102.4	102		251 and 252 condemned.
253	Gr. Dur.	"		"	100.6	"	105	105.6	106.4	105.2	105.6	103.8	104.4	104.4	104	In heat.
254	"	"		"	100.6		101	100	102.2	101.6	101.4	100	100	100		
255	Gr. Hol.	"		"	102.4		105	105.6	105.2	104	104	102.8	101.4			Condemned.
256	Gr. Dur.	"		"	101.8		102.8	104.4	105.6	103.6	105.2	102.6	102.6			Condemned.
257	"	"		"	100.2		103	106.2	106.8	105	105.2	103.4	102.2	101.6		Condemned.
258	"	"		"	102		106	107	107.2	106	106.4	104.8	105.6	101.6	104	Condemned.
259	Gr. Hol.	"		"	102		105.8	105.6	103.6	104.6	104	103.6	103.8	103.2	103.4	Condemned.
260	"	"		"	100		105.4	106.2	107	105.4	106	103.8	104.8	104.8		Condemned.
261	"	"		"	102		103	104.6	103.4	104	102.4	103.4	103.4	104	104	Advanced pregnancy.
262	Gr. Jr	"		"	101.8		105	105.4	106.4	105.6	106.4	105	104	102.6		Condemned.
263	Gr. Hol.	"	1	"	102		101	101.4	101.2	100						
264	"	"	1	"	102		102	103	102.6	100.6						
265	"	"	1	"	102.6		105	106	105.8	104.4	105.4	105.6	104.6	104.8		In heat.
266	"	"	1	"	101.8		102	102.6	102.8	101						
267	"	"	1	"	102.2		102.2	102.6	102.8	101.2						
268	"	M	1	"	100.6		102	101.4	100							
269	"	F	1	"	101.8		101.4	102.4	101.8	100.4						
270	"	"	1	"	101.4		102.4	102.2	103.6	100.6						
271	Gr. Jr.	"	8	"	100 6		102.6	104.4	105	103.8	103.8	102.6	101.6			Condemned.
272	Gr. Dur.	"	10	"	100.4		101	102	104.6	102 8	103.8	102.6	103	103	103	Advanced pregnancy.
273	"	"	8	"	102		104	105	105.4	104.4	104 8	104.8	104	103	103	Advanced pregnancy.
274	"	"	12	"	100		101	101 6	103	101 6	103	102.4	102	101.2		
275	Gr. Jr.	"	5	"	101		104	104 6	105.8	104.6	105.4	104	104	103.2	102	Condemned.
276	Gr. Dur.	"	6	"	100		105	105.4	106.2	104.4	105.6	103.6	103	100.4		Condemned.
277	"	"	12	"	100.4		101	102	101.8	100.4	102	102	101	101		
278	Gr. Ayr.	"	10	"	101.6		101	102.8	104.4	103.8	103.4	103	102.6	102		Condemned.
279	Dur	"	4	"	101.4		106	106.6	107.8	104 6	105.	103.6	103	103.8	101.6	Condemned.
280	Guernsey	"	6	"	101.6		101.2	102	102	100.8	102	100.6	101.6	101.4		
281	Gr. Hol.	"		"	101		100.6	102.6	105	104.2	103.6	102	102	102		Condemned.
282	"	"	6	"	101.2		101.8	101	101.4	101 2	100	101.2	102	100.4		
283	"	"	10	"	101.6		104.8	105.2	105.4	103.8	104	104	103.6	102.4		Condemned.
284	"	"	6	"	100		100.4	100	100.6	100.4						
285	"	"	2	"	102		102	102.6	102.2	101.6						
286	"	"	1	"	102		101.8	101.4	102.2	101	101					
287	"	"	1	"	102		101.6	102	102.8	100.4						
288	"	"	1	"	103		102.6	102.4	101 6	100 4						
289	"	"	1	"	102		102.2	102.4	102.8	100						
290	"	"	1	"	102.6		102.8	103.4	103	102.2						
291	"	"	1	"	103		102.2	102.8	102	101.2						
292	"	"	1	"	102		102.6	102.4	101.8	100						

(Copy.)

WM. HENRY KELLY,
Inspector.

The owner was informed that he should not sell the milk from these cows unless he sterilized it. As the owner was not satisfied with the first test, not believing in tuberculin, Prof. James Law and myself made both a physical and tuberculin examination of the animals that reacted on the first test. The time between the tests was six months. During the period between the tests, six of the reacting animals were disposed of by the owner, consequently we examined thirty-three, out of which twenty-one gave a typical reaction, as will be seen by the temperature charts below. Some showed disease on physical examination as well.

NUMBER OF ANIMAL.	Breed.	Age.	Sex.	Weight.	Date of calving last or next.	Temperature before June 29, 1899—6 p. m.	TUBERCULIN INJECTED JUNE 29, 1899.		TEMPERATURE AFTER INJECTING TUBERCULIN JUNE 30, 1899.								Remarks.
							Hour.	Amount.	8 a. m.	9 a. m.	10 a. m.	11 a. m.	12 m.	1.30 p. m.	2.15 p. m.	3.45 p. m.	5.15 p. m.	
		Yrs.		Lbs.		p. m.												
276	Native	.....	F.	.....	.....	102.6	11	2 C. C.	102	102.1	102.4	102.6	102	103.8	103.4	103	103.5	In heat.
258	"	14	"	.....	.....	101.4	11	"	102.6	102.5	102.7	103.5	101.5	103	102.6	103	103.2	
Brown roan	"	9	"	.....	.....	102	11	"	105	105.5	105.2	104.6	104.5	104.4	103.8	103.2	102.4	Condemned.
232	"	10	"	.....	.....	.....	11	"	104.4	105.6	105.7	105 5	104.7	104.8	104	103.4	104	Condemned.
283	"	10	"	.....	.....	102.2	11	"	103.4	104.1	104	104	103.3	103.1	102.6	102.6	102	Condemned.
256	"	14	"	.....	.....	101.8	11	"	101.2	104.7	106.3	105.9	105.7	105.8	106	106	106.2	Condemned
239	.....	9	"	.....	June 6, 1899	102.2	11	"	102.7	100.6	101	101.4	102 2	102.2	104.6	105	104.8	Just calved.
235	H. Gd.	5	"	.....	.....	103.6	11	"	101 2	101.7	101.9	101.8	100.7	101.6	101.2	101	103	
257	Native	11	"	.....	.....	102.8	11	"	104.7	105.1	105 2	105.8	106.2	105.3	106	105.4	103.2	Condemned.
237	"	10	"	.....	.....	101.8	11	"	103 6	105	105.8	105.2	104.8	106 2	106	105	105	Condemned.
271	"	7	"	.....	.....	102	11	"	101.2	101.3	102.2	101.2	102	103.5	103.8	104.2	104.3	Condemned.
227	"	.....	"	1,100	.....	101.8	11	"	101.8	101.6	101.3	101.4	98.5	101.9	102.6	102	102.5	
234	J. Gr.	.....	"	800	.....	102.2	11	"	105.2	104.7	104.9	104.7	103.2	101.5	104	104	105	Condemned.
243	J.	.....	"	800	.....	102.6	11	"	103	102.5	101.4	100.1	100 8	101.4	102 3	101.9	101 6	
216	.....	.....	"	1,050	.....	102.2	11	"	102.5	103.3	104	104.5	102.5	102.3	101.8	101.2	101	Condemned.
McMahon	H. Gr.	.....	"	.....	.....	101.6	11	"	101.3	100.6	101	101.2	.....	.....	.....	.....	.....	Cow not injected with tuberculin; could not be found at time of injection.
245	H. Gd.	.....	"	900	.....	101.6	11	"	102.4	103.5	104.5	105	104	104.4	106	104.3	105.8	Condemned.
262	.....	.....	"	.....	.....	103.2	11	"	106.7	105.6	103.7	103	101.8	101.2	101.6	101.6	101.4	Condemned.
278	.....	.....	"	.....	.....	103.2	11	"	101.9	101.7	102	102.3	102	103.1	103.7	104.2	104.3	About to calve.
279	H. Gr.	.....	"	.....	.....	101.8	11	"	101.6	101.1	101.2	101.6	101	99	101.4	103	101.6	
252*	.....	.....	"	.....	.....	.....	11	"	105.2	106	106.7	105.8	106	105.1	105.8	104	103.4	Condemned.
247	H. Gr.	.....	"	.....	.....	102 2	11	"	103.1	103.2	104.4	101 4	105.6	104 9	104.4	104 2	103.7	Condemned.
259	.....	.....	"	.....	.....	102.8	11	"	105.8	104.8	105.7	106	105.7	105.4	106	105.8	105.8	Condemned.
260	.....	.....	"	.....	.....	103.2	11	"	101	102	102 3	103.2	104.8	103.7	105.2	104.4	103 2	Condemned.
281	.....	.....	"	.....	.....	101.4	11	"	102 6	104	105	105.2	101.5	103.5	104.6	103.8	103.9	Condemned.
251	.....	.....	"	.....	.....	102.4	11	"	104.2	102.6	102 3	101.4	102	99	102.4	103	102	Unable to breed her for two years.
244	H. Gr.	.....	"	.....	.....	101 8	11	"	101.6	103.3	104.8	105	103.8	104	103.2	102.6	101.6	Condemned.
219	.....	.....	"	.....	.....	101.8	11	"	101.3	102	101.8	102.6	104.4	104.6	104	103.2	103.4	Condemned.
Broken-horn Hol.	Hol.	.....	"	.....	.....	101.8	11	"	103.6	105.6	105.9	105.6	103.7	104.9	105	105	106	Condemned.
204	"	.....	"	.....	.....	103.2	11	"	105.8	106.8	105.8	106	105.6	106.4	105	104.6	105	About to calve or abort.
207	"	.....	"	.....	.....	101.8	11	"	105	106.4	106.2	105.7	104.7	105.4	104 9	104.3	104.4	Condemned.
275	.....	.....	"	.....	.....	101.6	11	"	102.1	103	103	103	102.9	102	102.7	102.3	102	
Coates	H. Gr.	.....	"	1,050	.....	102.4	11	"	103	104.8	105.2	104.4	102.8	102.5	106.6	102.6	102.9	Condemned.

* Cow not in barn when temperatures were taken.

Original. (Signed.) JAMES LAW.
WM. HENRY KELLY.

During the summer, there has been a statement made by a veterinarian that bovine tuberculosis is *not* communicable to man.

Crookshank, in his text-book of bacteriology, states the following:

"The bacilli in tissue sections of bovine tuberculosis are shorter and less granular than those in human tubercular sputum, but in milk they are quite as long, and even longer, and very distinctly granular or beaded, and are thus brought much closer, morphologically, to the bacilli in human sputum. Speaking generally, however, the average length of the human bacilli is greater than the average length of the bacilli in cows' milk, but the longest of the bovine bacilli cannot be distinguished in length from the longest human bacilli. There are, however, exceptional cases, for in some preparations of pus from human beings the bacilli is remarkable, not only for their thinness, and their uniformly beaded character, but more particularly for their extraordinary length. They should be compared with other preparations, in which the bacilli, though in human sputum, are sometimes much more distinctly rod-shaped, much shorter and thicker, with complete absence of any beaded appearance. Neither length nor granularity is a characteristic sufficient to denote any specific difference between human and bovine bacilli."

Friedberger & Frohner, in their veterinary pathology, say: "The tubercular matter of animals was found to possess the greater power of infection; then came the sputum of tuberculous men and the milk of tuberculous animals, and, lastly, tuberculous flesh. The identity of tuberculosis of cattle with that of men has been proved by numerous positive transmission experiments."

Sternberg also says: "A more common mode of infection, especially in children, is probably by the way of the intestinal glands, from the ingestion of the milk of tuberculous cows. That infection may occur by way of the intestines has been proved by experiments upon rabbits, which develop tuberculosis when fed upon tuberculous sputum. And that the tubercle bacillus is frequently, if not usually, present in the

milk of tuberculous cows has been proved by the experiments of Bollinger, Hirschberger, Ernst and others. In Hirschberger's investigations, milk from tuberculous cows induced tuberculosis in guinea pigs when injected subcutaneously or into peritoneal cavity."

The conclusion is reached that the milk may contain tubercle bacilli even when the udder of the cow is not involved. In view of the facts stated, the great mortality from tubercular diseases among children, many of whom are removed from other probable sources of infection, is not difficult to understand; and the practical and simple method of preventing infection in this way, afforded by the sterilization of milk used as food for infants, must commend itself to all.

As to whether or not the bacilli is found in the milk of tuberculous cows, Dr. Sydia Rabinowitch and Dr. Walter Kempner, in their paper published in the Zeitzchrift fur Hygiene and Infectionskrankheiten, have thrown considerable light on the subject. In this paper, they state that Obermuller has shown that 61 per cent. of the milk examined by him in the Berlin market contained tubercle bacilli. By Petrie, only 14 per cent. of the samples tested by inoculation on animals. The researches by Rabinowitch showed that of twenty-eight samples of varying origin, 28 per cent. contained tubercle bacilli. In 1880, Bollinger produced inoculation tuberculosis in experimental animals with the milk from a cow that had tuberculosis of the udder, and also with milk from a tuberculous cow, in which there was no perceptible disease of the udder.

May inoculated with the milk from six tuberculous cows, and obtained a positive result in but one case. The milk came from a cow in which the disease was lightly developed and involved the udder. Stein made a series of experimental examinations, consisting of fourteen intraperitoneal injections with milk from cows suffering with tuberculosis in different stages and obtained four positive results. In these four cases, the cows furnishing milk were highly tuberculous, but none had diseased udders. Out of sixty-three highly tuberculous cows which were

investigated by Bang, 14 per cent. were found infectious. He believes that milk can be infectious without visible disease of the udder, in case the cow in question is in an advanced stage of tuberculosis. Herschberger also concludes from his investigations that the milk can be infected without tubercular disease of the udder, even where there is but little disease of the lungs. However in advanced generalized tuberculosis or udder tuberculosis, the infectiousness of the milk is greatest.

Ernst examined 114 samples of milk from thirty-six tuberculous cows without infected udders, and found the milk infectious in 28.57 per cent. In 50 per cent of the cases the infectiousness was determined by inoculation alone. In 35.7 per cent. the tubercle bacilli were found by microscopical examination. Smith & Schroeder examined six tuberculous cows without discoverable udder disease, and obtained positive results in two cases, both by inoculation and by microscopical examination. Schroeder also examined thirty-one cows in which tuberculosis had been diagnosed, either by clinical examination or tuberculin test. Disease of udder could not be found in any of these cases. In but 6.5 per cent. could positive inoculation results be obtained from injection. Delephine, by inoculation, proved the infectiousness of the milk of two out of six cases that had reacted to tuberculin, and also presented physical evidence of tuberculosis. In both these cases there was well-marked udder tuberculosis, and the diagnosis was confirmed by microscopical examination.

It is shown by the above experiments that milk from tuberculous cows is infectious in from 6 to 55 per cent. of the cited cases.

The fifteen cows examined with tuberculin and reacted, by Profs. Koch and Schueltz, at the Veterinary High School at Berlin, showed by inoculation positive results in ten cases.

It seems from the above evidence that milk from tuberculous cows is infectious and dangerous. Rabinowitch and Kempner say: "We are justified in asserting that the milk from cows that react to tuberculin must be suspected of being infectious in every

case." If it is proved that the milk from reacting cows does contain the tubercle bacilli, and is infectious, it might be well to show whether bovine tuberculosis is communicable to man.

"An honored member of the United States Veterinary Medical Association was inoculated on the back of the hand in making a post-mortem examination of a tuberculous cow, and the sore swelled, ulcerated and refused to heal, and when excised was found to contain tubercle bacilli. He had no ulterior bad consequence." (Law.)

"Oliver records the case of a twenty-year-old girl of vigorous health, and good antecedents, who contracted a fatal tubercular meningitis, having drank the milk of cows having tubercular ulcers on their udders, which were found on slaughter to have generalized tuberculosis. (Semaine Medicale, February, 1892.)

Ernst records the following: "A family cow died of chronic pulmonary tuberculosis, from which she had suffered severely for one year. Dr. C. H. Peabody, Providence, found that the tuberculous lungs and heart weighed 43.5 pounds, and extensive tubercles in the mediastinal and mesenteric glands, trachea, tongue, spleen, kidneys, intestines and udder. Three months later the baby sickened, and in seven months died of tubercular meningitis."

"Gordon of Quincy, Mass., records the case of a ten-months child of healthy parents and ancestry, which had fed on the milk of a cow with advanced tuberculosis, and which died after a few weeks of acute tuberculosis." (Ernst.)

"A Scotch family, strong and healthy, had a herd of cows which contracted tuberculosis. Two young daughters brought up on the milk died of tuberculosis; while the two older brothers, using little or no milk, remained well and hearty." (Tuberculosis. Nat. Vet. Assn., London, 1883.)

"Anderson, Iceland, reports the death from tuberculosis of a child of six months, fed on the milk of a cow suffering from tuberculosis of the udder. The mother developed symptoms of consumption after the death of the child." (Hatch Exp. Sta. of Mass. Agr. College.)

"Mr. E. J. Harriman of Arden, Orange Co., N. Y., bought thirteen cows of R. J. Bush, of Bridgeton, N. J. Shortly after the purchase, Mrs. Durston, wife of the manager of the farm, gave birth to a child. Not being able to nurse the child, one of Bush's cows was sent to the Durston farm for the milk supply of the family. The milk of this cow was used only by the Durston family. Three months after the use of the milk, the child became sick, and at the age of six months the child died of tuberculosis, and the mother has undoubted tuberculosis. The history of Mrs. Durston's family is an excellent one; her father died at the age of eighty-five years, and her mother between seventy and eighty years. Post-mortem of the cow revealed generalized tuberculosis." (Faust.)

"The Cromwold family of Long Island, N. Y., suffered the loss of 139 cows, a herd of swine, fowls, dogs and cats. Dr. Faust held post-mortem on sixty-nine cows and bulls. In his report to the Board of Health is the loss of a three-year-old child of tuberculosis, and since the investigation two of the sons, grown up, have died of tuberculosis. No consumption was known in the family from either parent."

"On a farm, within a radius of a few miles from Albany, there is a young man, about nineteen years of age, who has tuberculosis in the advanced stages. The boy's parents are living and apparently in perfect health; also his sister and brothers. When the boy's parents moved to the farm, all of their children were healthy. This boy, being fond of milk, drank the milk fresh from the cows. After a few months, it was noticed that he had a peculiar cough, and a physician, being consulted, informed him that he had consumption. A few months later the herd, comprising sixteen cows and one bull (all registered Jerseys) was examined with tuberculin, and thirteen of the seventeen reacted. In due time, the reacting animals were slaughtered, and all were found tuberculous."

EXPERIMENTAL TUBERCULOSIS.

Bollinger made intraperitoneal inoculation of a three-months-old calf with liquid from a tuberculous human lung, and killed the subject seven months later. Fibroid pediculated tumors, ranging in size from a pea to a walnut, hung from the mesentery and spleen, and the mesenteric and retroperitoneal glands were tuberculous. (Munch med. Wochenschr., 1894.)

Sidney Martin fed four calves seventy c. c. sputum, containing a large number of bacilli. Three killed, after four, eight and twelve weeks, respectively, had fifty-three, sixty-three and thirteen nodules respectively in the small intestines, mostly in Peyers' patches. The fourth, killed after thirty-three weeks, showed no lesion.

Two calves receiving at one dose 440 c. c. sputum, containing a large number of bacilli, were killed after eight and nineteen weeks. The first had tuberculous nodules in the intestine and mesenteric glands; the second showed no lesion. (Report of Royal Commission on Tuberculosis.)

Frothingham injected into the peritoneum of two calves, three and thirteen weeks old, a culture of bacilli, isolated one year before from the liver of a child. Slight local nodules only were produced, some like spontaneous tubercle, others granulation tissue. Two other calves, three weeks and two months old, were injected in the trachea. One had a large local abcess in the neck, with a small number of tubercles (without bacilli) in the lungs and liver. The other showed no lesion. With the advance of the disease along the lymph channels to the glands, lungs and liver, there was a promise of further development under more favorable conditions of life.

The sanitary significance of the intercommunication of tuberculosis between man and animals, and the importance of methods of diagnosing the disease in its early stage in cattle, rendered it desirable to obtain the opinion of those thoroughly versed in the matter. Dr. James Law, director of the New York State Veterinary College, was requested, therefore, to prepare a statement concerning

bovine tuberculosis, and Dr. V. A. Moore, of the same institution, a statement concerning the preparation and diagnostic value of tuberculin. The reader is referred to these papers for further enlightenment on these very interesting topics.

Judging from the above cases, and those cited in Dr. Law's article, which are facts recorded by eminent authorities, it would seem that bovine tuberculosis is communicable to man. We certainly cannot force a person to shut himself up in a room and take no other food than the meat of tuberculous cattle and milk from a tuberculous cow, and as yet no person has voluntarily offered to do so, to prove the absolute correctness of my conclusion; but when we will take a person's life on circumstantial evidence, why should we exact more exhaustive proof in cases like this?

SPINAL MENINGITIS.

One case of this was reported and investigated. This occurred in the northern part of the State. Prior to my visit, a number of cattle had died, and eight were sick and examined by me. It seemed to be confined to a certain locality, or at least to three or four farms. Treatment was prescribed, and only two deaths were reported since my visit.

RABIES.

In the summer, the attention of the Department was called to the disease known as rabies, which had broken out in Erie county. During the outbreak, a number of people and animals were bitten. Some of the cases proved fatal.

On May 15, an eight-year-old baby was bitten by a rabid dog; this child developed rabies, and died August 7. On the same day, a playmate, who tried to free the first boy from the rabid dog, was bitten. Nothing was thought of the bite until the death of the first boy. The second boy was then sent to the Pasteur Institute, New York city, where he died of rabies August 27. In the town of Lancaster, between August 4 and 10, a farmer had four cattle

bitten by an unknown rabid animal, and all the animals died of rabies July 22. Another farmer in the same town had two cows bitten by a rabid dog. The cows were killed August 11, in the last stages of rabies, by H. Hausser, D. V. S. The brain of one of the animals was removed and sent in glycerine to Dr. V. A. Moore of the New York State Veterinary College, for animal inoculation. In a letter from him, bearing date of September 13, he states: "Both of the rabbits inoculated with the cow's brain have died of rabies."

July 2, two calves in the town of Marilla were bitten by a rabid dog. One calf died with symptoms of rabies July 17; the other, with the same symptoms July 19. John Wende, V. S., reports two cows having been bitten by a rabid dog and dying of rabies. A cow at Cheektowaga was bitten by a rabid dog September 20, and killed November 8, with the symptoms of rabies.

W. L. Baker, V. S., reports that he was called, October 6, to see a cow in the town of Concord, and he pronounced the animal suffering from rabies. She was then slaughtered. The cow was bitten September 29, and showed symptoms of illness October 1. Her brain was removed, and a couple of dogs inoculated with an emulsion of it. Both dogs developed rabies.

A cow belonging to a resident of Lockport was bitten August 14 by a rabid dog, and died with the symptoms of rabies August 30. A horse, five pigs and a calf belonging to a farmer in the town of Lockport were bitten by the same dog on the same day. The calf died August 31, one hog died September 2, and the horse and the remaining pigs September 17. All manifested the symptoms of rabies. Two cows belonging to another farmer in the town of Lockport were bitten by the same dog August 15. These animals showing symptoms of rabies, were killed September 7 and 9. Four cows, belonging to a farmer in Niagara county, which were bitten by a strange dog, developed symptoms of rabies and died.

On my first visit to Buffalo, I called upon Veterinarians John Wende and W. L. Baker, thinking that they would be able to

give me some definite information relative to rabies. A letter subsequently received from Dr. Wende states:

"The first case I saw connected with the present outbreak was a pug dog, over a year ago. Can furnish authentic proof by owner that I diagnosed the case as rabies and destroyed the dog. It would be impossible for me to tell how many people and animals were bitten. I believe that people have died of hydrophobia, and a great many were sent to the Pasteur Institute for treatment. Dogs, horses, cattle and one deer have died to my knowledge. Some poultry and hogs have been reported, but did not see them myself."

In a letter received from Dr. W. L. Baker, he made the following statement:

"About the middle of March an Irish setter was brought to me for treatment, and placed in confinement as a suspicious case of rabies, which developed into a well marked case, with all the symptoms, and died on the second or third day. The dog was noted for its kindness and friendly manner toward every one. For about three or four days previous he had acted strangely, and had scarcely eaten anything. He followed a delivery wagon, and showed great disposition to fight; the driver informed me that he refused to allow the dog to follow any longer on account of this, and that the dog had positively a dozen or more fights within the past two or three days. Then, I think it was about the first of April, a greyhound was brought to my place for treatment, showing symptoms of rabies in the dumb form. He was destroyed. The history of the case is: For a few days the dog had been unable to eat anything; the dog was about paralyzed, the mouth hanging open. This dog had done no damage, as he was unable to bite. About a week later the same party brought us a cocker spaniel that had acted strangely for a few days, and had refused to eat. This dog was a great pet, and showed no bad signs. It was placed in quarantine and died the third day after, having developed a well marked case of rabies. The parties

who owned the dog say that he had not bitten any dog, neither had he been bitten, so far as they knew.

"The next case was a fox terrier. It was brought there for two or three days, and was unable to eat, and showed marked symptoms of rabies, and was immediately destroyed. About the same time a bull terrier, acting strangely, was placed in quarantine, and, in a few days, developed well marked symptoms of rabies in ferocious form, and was destroyed. About the first of June a small black dog was brought to me for treatment; the parties stated that he had been snapping and biting of late, and had had two or three fights with other dogs, which was unusual for him. From its general appearance it showed symptoms of a rabid dog, and was placed in quarantine until the next day, when it was more marked, and the dog destroyed. About that time I was called to see a dog on the west side; it showed signs of rabies; the dog was immediately destroyed. The history of this case is, that they had a dog die with symptoms the same as this dog presented at this time, about three or four weeks prior, and that the veterinarian attending him at that time stated that the dog died with diphtheria. About that time I was called into consultation with a veterinarian to see a case he was treating that was pronounced rabies in a dumb form, and that animal was destroyed. This case had been kept in confinement and did no harm. About a week ago a small dog, which was a great pet of its owner, became cross and refused to eat for a day or two. It was allowed to run about, and it is said to have bitten every dog that it met. When it was brought to me it showed every symptom of rabies, and died the following day. At the same time I was called to see a case, on the west side, in a pet dog that was acting strangely, and refused to eat; the following day it developed well marked symptoms of rabies, and was destroyed."

While at Buffalo, John Wende, V. S., suggested that if I should call upon his brother, Dr. Ernest Wende, health officer, probably he could give me some desirable information relative to rabies. Dr. E. Wende informed me that he had re-

ceived, that morning, a telephone communication from Dr. C. E. Bowman, health officer of the town of Alden, informing him that a dog had died from rabies the previous day. I immediately went to Alden and called upon Dr. Bowman, and, in company with him, visited several places where the rabid dog had been; also consulted several persons who had seen the rabid dog, and obtained the following information:

It was said that dog, owned by a man named Munn, acted strangely and bit a St. Bernard dog, owned by Mr. Cook, while in company with other dogs, following a bitch in heat. About two weeks after this the Cook dog, which had always been noted for its good disposition, snapped and snarled at chickens and other animals, and fought all dogs that came in his way. As he had not eaten in the morning, the owner thought the dog's strange actions were due to sickness. The greater part of the day the dog slept in the cellar — an unusual occurrence. During the evening, according to Mr. Cook's custom, he called the dog on the piazza, had him lie down, and used him for a pillow. Mr. Cook slept until about 10:30 P. M. That was Friday, July fourteenth, and it was the last Mr. Cook saw of his dog alive. It is also said that the Cook dog bit a dog owned by F. Asmus, and that this dog acted strangely, and disappeared Tuesday, July eighteenth.

Prior to Asmus' dog being bitten by Cook's dog he was always quiet, and never went away from home. The Cook dog was seen next in the cellar of Mr. W. M. Idsardie, town of Lancaster, on the pavement road, eight or nine miles from Alden. When first noticed he was asleep in his cellar. Mr. Idsardie tried to drive him out, but the dog would not be driven; he then shut the door to keep him; later, the dog made such a peculiar noise that Mrs. Idsardie determined to let him go. Upon opening the door the dog sprang at her; Mrs. Idsardie stepped to the side, and he went by; he then bit a cat; afterwards fought with Idsardie's dog, crossed the road and went to George Walters' blacksmith shop. Idsardie's dog and cat were both killed. Upon reaching Walters'

shop he took Walters' dog's head in his mouth and carried him across the road to Idsardie's, and laid him down. The Cook dog then went down the highway, in a northerly direction, to George Staub's, and laid on his piazza. At this time, Mr. Staub's two granddaughters, four and six years of age, respectively, were on the piazza. There was a doll on a chair and, as the dog went near it, the child, fearing he would harm it, went up to the dog, put her arm under his neck and took the doll and ran away. After lying awhile, the dog took to the highway and went in a northerly direction, stopping at T. Walters, which is two houses from Staub's. The butcher wagon was standing in front of the door, around which were a number of women and children. Mr. Hall, the butcher, threw the dog a bone, which he took in his mouth immediately, and went and buried it. Mr. T. Walters' fourteen-year-old boy took the dog by the collar and led him into the house, where Mr. Walters was lying sick upon a couch. Mr. Walters caressed the dog and talked to him, after which he told him to lie down; the dog obeyed. After lying about five minutes the dog rose, and again Mr. Walters commanded him to lie down immediately, which he did. Later, M. S. Walters, an elder son, came in, took the dog by the collar and led him to the woodshed, and tied him; he then caressed the dog. As he turned to leave, the dog grabbed his hand and severely lacerated it with his teeth. Mr. Walters punished the dog for biting, when the animal sprang at his throat. The father went to his son's assistance and untied the dog, at the same time turning him outdoors. The dog took to the highway and started in a southerly direction to J. Richardson's place. Upon arriving there, he immediately went into Mr. Richardson's woodshed and laid down. Mrs. Richardson came out, and, as the dog was showing signs of extreme heat, gave him some water to drink, which he drank. Mr. Richardson's dog came in the house, and immediately the Cook dog sprang upon him and fought him; afterwards he took to the highway, but returned about 2:30 P. M. Upon his return, Mr. Richardson fired a gun at him twice to drive him away. He then went across the

field to the Dutch Road, and was next noticed at Frank Nichter's, about 7:30 P. M., Saturday, when he fought with Nichter's dog. Leaving there he took to the highway, and went to the New York Central tracks, then took an easterly direction towards Wende. Between 9 and 10 A. M. this dog visited the farm of L. Armburst; he went up to Mrs. Armburst and smelt of her; she thought he acted strangely and she went into the house, after which he chased Mr. Armburst's dog. He then went down the highway, in an easterly direction, but returned about 7 P. M., and chased Armburst's calves, which were in the field. About 11:30 P. M., the same day, July fifteenth, the Cook dog bit John Gety, at Wende. Mr. Gety went to the Pasteur Institute on the nineteenth inst.

A horse and two cows, belonging to F. Vine, Wende, were bitten, after which one of the cows died of rabies. A dog belonging to Wolbach was also bitten. The Cook dog was next seen Sunday morning, July sixteenth, at Looneyville, where he bit Otto A. Siehl, who went to the Pasteur Institute on the twenty-first. After biting Siehl, he crossed the railroad tracks and went into the railroad station; a few minutes later as the station agent entered the station, the dog immediately sprang at him and bit at him, while passing out of the door; he then went around the depot and bit a horse in the lip. This horse was owned by Henry Erbg of the town of Lancaster, and was hitched outside the depot. The dog then started across the railroad tracks and went into the freight depot, when the doors were closed and the dog shot.

My attention was called to a number of cows in the village of Lancaster which acted strangely. I examined them, and they all showed symptoms of rabies. It was impossible to find out if the cows had been bitten by a rabid animal. It was stated that a strange dog had been seen near them. A post-mortem was made upon one, but there was no particular lesion. The brain was sent to Dr. V. A. Moore for animal inoculation. At the same time the brain of a dog that was killed in Buffalo, which was supposed

to be rabid, was also sent. In a letter from Dr. Moore, already referred to, bearing date of September thirteenth, he states the following: "Both rabbits inoculated with the cow's brain have died of rabies," and those (rabbits) "inoculated with the bits of dog's brain, sent in glycerine, are showing unmistakable signs of rabies."

I was called to East Aurora to see a dog that was shot by Dr. Kelsey, health officer of the town of Wales Centre. The dog had on a collar, to which was attached Buffalo license tag 2328. This dog was seen first at East Aurora, in the morning; he snapped at all dogs and objects, and went toward Wales Centre. Dr. Kelsey, having heard so much about rabies, and as the dog was acting strangely, shot him. As the dog had been killed about 36 hours, there was no use of taking the brain for animal inoculation, but judging from the symptoms, he undoubtedly had rabies.

As rabies is not always readily detected from other diseases, such as certain affections of the brain, teething, distemper, angina, intestinal parasites, enteritis, pentastorha in the nose and frontal cavities, foreign bodies between the teeth, or in the throat, or laxation of the lower jaw, and as a number of physicians and veterinarians have put themselves on record as disbelievers in the specific nature of rabies, post-mortems were made in all cases, where the animal had not been dead long enough for decomposition to take place, the brain and spinal cord removed, and rabbit and dog inoculation made.

Pasteur has demonstrated that a rabid brain loses its infectious virulence only when that part has become partially decomposed. There is also danger of producing septicæmia when a decomposed brain is injected into a healthy animal.

As rabies never occurs spontaneously, but is transmitted only by natural or artificial inoculation, in every case where it could be done animal inoculation was used for diagnosis. The majority of the inoculations were done by Dr. Moore of the New York State Veterinary College, and the method used was the same as described by him in the Twelfth and Thirteenth Annual Reports

of the Bureau of Animal Industry (1896-7) page 269, which is as below:

"The method of diagnosing rabies which we have followed and which the experience of pathologists has shown to be the best, is the subdural inoculation of rabbits with a suspension of the brain or spinal cord of the suspected animal. The subdural inoculation with the brain tissue of rabid animals was first demonstrated by Pasteur to be more reliable and more rapid in its results than the subcutaneous injections. The procedure is simple. The brain of the suspected animal is removed with asceptic precautions, as soon as possible after death. A small piece of the brain or spinal cord is placed in a sterile mortar and thoroughly ground with a few cubic centimeters of sterilized water or bouillon. This forms the suspension to be injected. The hands of the operator and all instruments are carefully disinfected. The rabbit is etherized, the hair clipped from the head between the eyes and ears, and the skin thoroughly washed and disinfected. A longitudinal incision is then made, the skin and subcutaneous tissue held back by means of a speculum, a crucial incision is made in the periosteum on one side of the median line to avoid hemorrhage from the longitudinal sinus, and the four parts of the periosteum reflected or pushed back. By the aid of a trephine a small button of bone is easily removed, leaving the dura mater exposed. With a hypodermic syringe a drop or more of the rabid brain suspension is injected beneath the dura, the periosteum is replaced, the skin carefully sutured and disinfected, and the rabbit returned to its cage.

"As soon as the influence of the anæesthetic has passed off the rabbit shows no appearance of discomfort. If the operation is performed in the forenoon the animal partakes of its evening meal with the usual relish. The inoculation wound heals rapidly, and the rabit exhibits every appearance of being in perfect health until the beginning of the specific symptoms, which occur ordinarily in from fifteen to thirty days after the inoculation. Occasionally the symptoms appear earlier than fifteen days, and in some cases the rabbits are not attacked for from one to three months."

The symptoms following inoculation were the same as described by Dr. Moore, in the above named article, as follows:

"The symptoms following the inoculations have been quite uniform, the only pronounced difference being in the length of time the rabbits lived after the initial manifestations of the disease. The fact should be clearly stated that rabbits do not ordinarily

become furious. In some instances they are somewhat nervous for a day or two preceding the paralysis. There appears to be marked hyperæsthesia. Usually the first indication of the disease is a partial paralysis of one or both hind limbs. This gradually advances until the rabbits are completely prostrated, the only evidence of life being a slight respiratory movement. The head occupies different positions. In some it is drawn backward as in tetanus; in others it is drawn down with the nose near the fore legs; and in still others it is extended as if the animal were sleeping. The period of this complete paralysis varies from a few hours to a few days, but ordinarily it has not exceeded twenty-four hours. Although these animals were unable to move voluntarily there was a reflex action of the limbs until a very short time before death."

In cattle and dogs rabies may be divided into three forms: The furious, paralytic and the lethargic.

The first symptom usually is a partial or entire loss of appetite. Sometimes there is a morbid appetite, the animal will eat foreign substances, such as straw, coal and wood; while a bitch often eats its own vulva and devours its own dung and urine. There is often a morbid sexual disease. There is usually a dullness; in other cases, restlessness, watchfulness, nervousness, and a change in the animal's disposition from a good-natured to a resentful and quarrelsome one. The dog attacks all kinds of animals, as well as man, and even will go out of his way to fight; will hide in dark places secluded by himself; often will bark and bite at imaginary objects, and, if any foreign object be put near him, will grab and hold it with his teeth; in other cases will run toward objects and bite at them until the mouth is bruised. There is also a peculiar change in the dog's howl; also, there is usually a tendency to gnaw the seat of inoculation, which often will be found red and swollen. A short time after some of the above-named symptoms are noticed, if loose will start away from home and attack all kinds of animals. They usually cover a great distance — from five to twenty miles — and do considerable damage. The nature of a rabid dog is to bite and not devour any of their victims, thereby increasing the number of inoculations. If the ani-

mal should be tied, occasionally, he will bark, try to break his chain and attack any person or animal that comes near him. During this stage there is often a period of quietness, and they will seclude themselves in a dark place, only to renew their attacks with more vigor. The intervals of quietness are attended by great prostration, which depends largely upon the previous attacks. If water be offered, the dog will usually drink. In the course of two or three days the furious stage changes into the paralytic one, which is shown by the partial paralysis of the hind limbs, unsteady gait, then paralysis of the lower jaw; the paralysis gradually becoming general and terminating in death in about eight days.

In paralytic or dumb rabies paralysis is noticed prior to any other symptom. The animal is dull, quiet and depressed, shows very little tendency to bite or wander, due to the paralysis. The lower jaw soon drops, allowing the saliva to hang from the mouth. General paralysis soon sets in, and the animal dies in about two or three days.

The lethargic form is not manifested by furiousness or madness. The animal will curl himself up, and cannot be aroused, in spite of the methods which may be used. He will not recognize any one or any one's call, will not eat or drink. He will gradually grow worse and die about the tenth to the fifteenth day.

In cattle, usually, the first symptoms are indifference to food and water, and persistent constipation, temperature slightly elevated, and, if in the barn, there will be staring countenance, head and ears erect, as if in act of listening and looking for some imaginary enemy. In other cases they will make a peculiar bellow, try to break from their fastenings, and will hook anything that is before them; often, in doing so, will break one of their horns; at times will bite at anything near them; if turned out in the yard or pasture, and some small animal, especially a dog, should be near, there is a persistency in driving them from the field. They will attack with head down, at the same time making a peculiar bellow. In running there will be noticed an unsteady gait, due to the partial paralysis of the hind extremities. The cow will often fall, and

with difficulty rise; immediately will renew the attack. Rabid cattle will not attack a person; sometimes they will butt their head against trees, fences, barns, or any object; they will also paw the ground, at the same time making a peculiar bellow; in walking there is an unsteady gait. The eyes are dull, and the animal soon becomes emaciated and dies in about three days. Upon post-mortem there are no particular lesions.

According to your instructions, Inspector Quigley was sent to Buffalo, to ascertain if the quarantine was kept enforced in the specified district, and report any new cases of supposed rabies. At different times he caused the brains of supposed rabid animals to be removed, and forwarded them either to Dr. V. A. Moore or myself, but, in several instances, as they were not properly shipped, the brain had started to decompose, and this prevented animal inoculation. In the animal inoculated, the period of inoculation was from fifteen to thirty days.

In a letter received from John Wende, V. S., he states the following:

"In answer to yours of yesterday, will say that Dr. Thos. Carpenter and I made four inoculations with an emulsion of the brain of a rabid dog. The subjects were two dogs and two rabbits; one of each species were trephined and inoculated directly into the brain. The rabbit so treated died in less than eighteen hours from cerebral hemorrhage. The dog lived and developed the disease in the furious form in twenty-three days; he lived five days after with the disease. The other rabbit and dog were inoculated hypodermically in the neck. Neither of them developed the disease, although I kept them nearly three months before I destroyed them."

W. L. Baker, V. S., states the following:

"Dr. Belser inoculated three rabbits with the brain of a rabid dog. One rabbit died the same evening of cerebral hemorrhage, the other developed the symptoms of rabies in seventeen and twenty-two days respectively. Later, he inoculated five rabbits at different intervals with the brain of supposed rabid animals.

Two developed rabies in twenty-three and twenty-seven days respectively, the others were killed forty days after inoculation, without any symptoms of rabies."

Respectfully submitted,

WM. HENRY KELLY, V. S.

BOVINE TUBERCULOSIS.

IS THE BACILLUS TUBERCULOSIS OF CATTLE PERMANENTLY DIFFERENT FROM THAT OF MAN?

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In making a strictly sanitary survey of bovine tuberculosis one may as well avoid questions that are apt to be more or less misleading if treated as mere biological studies unless they are material to the practical work of sanitation. The question of difference in species or variety of the germ cannot interest us until we get an authoritative decision as to what a species means. The permanence, however, or variability of a germ as regards its pathogenesis has a direct and constant bearing on sanitary work, and is not to be obscured by any other question which does not involve this important issue.

After Koch's discovery of the bacillus tuberculosis, in 1882, it was assumed that all known forms of the germ were essentially identical and transmissible from animal to animal; but the inoculation of different genera and of cultures in different media and under varying conditions of temperature revealed, in successive cases, a very unequal capacity for growth and pathogenesis, which indicated decided, if even temporary, biological changes. Artificial culture media were seeded with difficulty with the mammal-grown bacillus, though after one or two generations it might be-

come reconciled to its new environment and take on a vigorous growth. The tubercle bacillus from the bird was found to grow with difficulty in most mammals, and the bacillus from the mammal in birds. The bacilli from both man and ox were found to produce much more pronounced lesions in guinea-pigs than in rabbits, but the germ transferred from rabbit to rabbit became increasingly fatal. Again, bacilli from human sputum were found to operate with diminished force in the bovine animal, producing in certain cases only a local tubercle in place of a generalized disorder. The bacteriologists, in drawing attention to such variations in experimental cases, have become the perhaps innocent causes of a crusade against all sanitary interference with tuberculosis in our herds, and the lay skeptics have practically denied any possible transference of the disease from man to ox or from ox to man. To correct such a conclusion it is important to bear in mind some established truths.

1. *This variability is common to microbes generally.* Certain bacilli, like those of anthrax, grow in the living body as rods only, but become long filaments in certain artificial media. They produce no spores in the living tissue, but do so readily in the carcass or soil. Transferred from ox to ox they are generally fatal, but if grown for several generations in guinea-pigs, and then transferred to cattle, the resulting disease is slight (Burdon-Sanderson, Duguid, Greenfield). Rabies passed from dog to dog is almost constantly fatal, but if passed through the ape and then back to the dog it is comparatively harmless (Pasteur). In both these cases the inoculated animals become immune from the more virulent germs, showing that they have passed through the actual disease in an unusually mild form. The later system of Pasteur is founded on this same general truth, as are also the methods of lessening the pathogenesis of germs by subjecting them to compressed oxygen, to graduated heating, to an altered chemical condition of the culture medium, to antisepsis, etc. For a time such weakened cultures often retain their lessened pathogenesis, even through a succession of cultures in a susceptible animal body, acting as if

the germ were indeed a distinct species. But it might well have been considered that a microbe which had changed its aptitudes in a given environment could presumably revert to its original habits under the incentive of a suitable medium. And this is precisely what does take place. Pasteur has shown that the less potent rabic virus becomes more potent when passed several times through the body of a rabbit, and that the weakened anthrax germ acquires greater force when passed through a series of small birds or newly-born mammals.

To come to tuberculosis, Trudeau tells us that a culture of bacillus tuberculosis from man inoculated on the rabbit, and then cultivated for two years *in vitro*, becomes much less destructive to guinea-pigs, and that after six years of such artificial culture all the guinea-pigs inoculated with it live for many months, some for two and a half years, and some even recover. The usual life of the guinea-pig after inoculation is seventeen days.[1] All of our zymotic diseases have in a similar way cycles of malignancy and benignancy. For a series of years measles, scarlatina, diphtheria, smallpox, or grippe have an unwonted mildness, and, again, one or another merges into a cycle of extreme and fatal malignancy. Rinderpest on the steppes of Asia is comparatively harmless to the native stock, but among outside cattle imported into the steppes or attacked in their native lands it is habitually fatal. Texas fever is mild among cattle in the Gulf States, but very deadly to Northern stock. Glanders is not at all fatal to horses of the plains, the Rockies, or the Sierras; but it becomes redoubtable when these horses carry it to the Eastern seaboard, and still more so in Western Europe. It is a common experience to see a malady transformed through the effects of heredity or acquired immunity, through environment or the temporary mitigation of virulence in the germ; and again we see the same disease, no longer restrained by such inhibitory conditions, bursting forth as a malignant and deadly plague. We have, therefore, no warrant for the hypothesis

[1] Johns Hopkins Hospital Reports, Bulletin 100.

that a pathogenic germ which, under given conditions of life, has lost in pathogenesis, but not in vitality, should continue forever to exist as a harmless microbe.

2. *Varying malignancy of the tubercle bacillus in man.* Nothing is more familiar to physicians than the slow progress of tuberculosis of the lymph-glands and bones, on the one hand, and its frequent rapid progress in pulmonary, abdominal, or encephalic organs on the other. It has on this account been rather difficult to persuade many of the etiological identity of scrofula and consumption. In experimental tuberculosis the same truth constantly crops up. Arloing and his followers found that the tubercle bacillus from the lymph-glands of man proved less virulent and deadly than that from the human lungs (*Lecons sur la Tuberculose*). As early as 1880, Creighton drew attention to this in his work on *Bovine Tuberculosis in Man.*

But the bacillus from the lungs is subject to such variations. Among seven specimens of human sputum cultivated by Theobald Smith six had a fair average vitality, while the seventh failed to perpetuate itself on dog serum.[2]

It should be strongly emphasized in this connection that the failure of extension and generalization of the sputum germ when transferred to cattle does not distinguish it from the tubercle bacillus as conveyed from ox to ox. Everyone at all experienced with the tuberculin test well knows that in most herds the majority of the tuberculous animals show no generalization, but only a localized tuberculosis. There is reason to believe that even recoveries take place after slight infection, and it is certain that many tuberculous cattle continue for years in what appears to be good general health. Unless in particularly susceptible subjects or under specially poor hygienic conditions, or unless in case of reinfection, the average bacillus of bovine origin habitually fails to produce in other cattle a rapid extension and generalization.

3. *Interchangeability of bacillus of man and bird.* Of all known forms of tubercle bacillus that of birds is the most distant

2 Journal of Experimental Medicine, 1898, No. 111.

from that of man or ox, and yet the beautiful experiments of Nocard[3] serve to establish their essential identity. Taking the bacillus of human sputum, which would not infect the fowl, he enclosed it in collodion capsules, which confined the bacilli while allowing transudation of the animal fluids, and left these in the abdomen of the chicken for not less than four months. He repeated this three times in succession with the product of the original sputum germ, and obtained a bacillus which was actively pathogenic for the chicken, though it had been harmless after the sojourn of four and eight months respectively.

This may explain the reported cases in which a flock of poultry have developed tuberculosis a few months after they were placed in the hands of a consumptive caretaker. That such transmission does not always occur is not surprising, considering that transmission between man and man is infrequent in comparison with the number of exposures. So in cattle the majority of exposed animals usually escape, although in such a case there can be no plausible explanation on the ground of a difference of germ. We have in every case to consider the necessity for receptivity as well as infectivity, and the lack of either is a complete bar to infection. When, however, we assume that the most diverse tubercle bacilli are descendants of one original stock, that a large flock must furnish some animals of more than usual susceptibility, and that such animals are subjected to continuous accessions of both bacilli and toxins, we can easily understand how some of the more adaptable germs will in time accommodate themselves to the new medium. A Pettinkoffer, with an immune constitution or a specially vigorous gastric digestion, may with impunity drink a culture of cholera spirillum, but the same is not true of the drunkard fresh from a spree and with seriously impaired digestion.

Bacillus tuberculosis in man and ox. Points of similarity. The bacillus tuberculosis of cattle is as a whole shorter and thicker than that of man, but many in both subjects are morphologically

[3] Annales de l'Institute Pasteur, September, 1898.

indistinguishable. Such differences are often far exceeded by different specimens of one stock of germ seeded on different media. There is no great difference in the thermal death-point, and the viability in light, dryness, cold, and putrefaction. The tendency is in all cases to colonize the lymph-plexus or glands and to develop the specific lesions, with slight variation in detail. The slow development of the lesions from both forms of bacilli and their histological similarity is another argument for their essential identity. The slow growth of both on artificial media, the demand of each for a medium having the same approximate composition, and the similar pathogenic and diagnostic characters of the toxic matters elaborated by both germs bespeak a primary identity. The very remarkable staining qualities of tubercle bacillus, from whatever source it may be drawn, are no less remarkable.

Tuberculosis of man and ox coextensive. The prevalence of tuberculosis in man and ox in the same country and district is so frequent that it may be safely set down as the rule. Among ichthyophagists and great fishing communities, like the people of the Hebrides, Iceland, Newfoundland, Greenland, and the coasts of Hudson Bay, tuberculosis is rare. In these countries cattle are few or absent, or, like the hardy highland kyloes of the Hebrides, they are kept in the open air. The immunity of the people is not due to insusceptibility, since they fall ready victims to tuberculosis when removed to infected countries and cities.

In Northern Sweden, Norway, Lapland, and Finland, where cattle are scarce and reindeer plentiful, tuberculosis is said to be rare, though the inhabitants live in the closest of dwellings through the long winter. In most of the Pacific islands there are no cattle, and the natives are comparatively free from consumption. In Hawaii since the introduction of cattle consumption has increased. Australia and Tasmania, which forty years ago were the great resorts for English consumptives, have become increasingly the homes of infection since the development of the cattle industry and the influx of phthisical subjects. Minnesota and Dakota, in the early

days, were held to be incompatible with tuberculosis, but since the advent of the white man and his stabled herds they have largely lost their sanitary reputation. The highest known mortality from tuberculosis to-day is that of the reservation Indians of these States, who feed on raw, diseased beef. In the Kirghiz steppes the Tartars subsist on the flesh and milk of their solipeds, and largely escape consumption. In Japan, Dr. Ashmead tells us that the common people escape tuberculosis, while the aristocracy suffer severely. He attributes this mainly to the debauchery of the ruling class; but it must not be overlooked that they eat freely of beef and dairy products, which the rice-eating poorer population do not. The same remarks apply in measure to the mandarin and plebeian classes in China. Holden tells us that tuberculosis is rare in Columbia, Ecuador and on the eastern slopes of the Andes, where little or no milk or butter is used. It must be further borne in mind that in these countries all herds live in the open air, and practically escape infection.

These examples must be contrasted with the consumers of beef and milk in civilized temperate countries, where the stock are largely kept indoors. A general average mortality of seven or eight per cent. from tuberculosis, and the post-mortem evidence in European and American hospitals of 33 to 50 per cent. which show tubercular lesions, recent or remote, cannot be lightly passed over. The contrast with our reservation Indians is still more striking. Holden and Treon testify that the meat furnished to the Indians is always poor and often diseased, and that when the stock arrives our hungry wards devour the internal organs raw, or, later, the flesh as pounded preserved meat, and still uncooked. The deaths of these Indians from tuberculosis is 50 per cent. of the total mortality.[4] Dr. Washington Matthews, who spent twenty-one years among the Indians, gives their food as the main cause of the disease, and states that when the supply of fresh meat is liberal the death-rate from tuberculosis is highest (Census of 1880).

[4] Medical Record, August 13, 1883.

If we now contrast this fearful mortality with the immunity of the Indians of Hudson Bay, Great Slave Lake, Alaska, and the North generally, we have a more suggestive picture. It may be conceded that the extreme Northern Indians, being beyond the cereal region, have a slight measure of protection in their meat diet; but the recent spread of tuberculosis, like a plague, among the inhabitants of Barrow Straits, when introduced by the frozen-in whalers and the relief party, is sufficient disproof of any claim of special insusceptibility. There can be no doubt that in this, as in other virulent diseases, the rule holds that the long absence of the infection secures the preservation of the susceptible lines of blood, so that when the contagion does come, it finds a more inviting field than in countries in which the more susceptible strains have been killed off and the comparatively immune have survived. Toward the Arctic circle the Indian must crowd into closer quarters in winter than his brother further south; but, in spite of all, the beef-eating Indian is being rapidly exterminated by tuberculosis, to which his brother of the north is a comparative stranger.

Exceptions: Their explanation. This statement would be incomplete without a notice of exceptions to the rule. The Cape Town branch of the British Medical Association reports "that tuberculosis is rapidly increasing there in the human population, while tubercle in cattle is almost non-existent." This finds an abundant explanation in the different conditions of life. The men live indoors and concentrate the infection, whereas the cattle enjoy an outdoor life and escape. In a latitude of 30 degrees south, where frost is almost unknown, and with a dry climate (12 to 30 inches of rain per annum), the colonists find no occasion for housing their cattle, so that the conditions for the prevention of tuberculosis are ideal. It may be added that cattle are far less numerous in Cape Colony than they formerly were. The destruction first by lung plague and later by rinderpest has made the cattle industry extremely hazardous and even before the advent of the rinderpest many had abandoned cattle and taken to sheep.

Parallel cases can be found in other countries. In Egypt, the

great resort of consumptives, cattle are almost immune, the abattoirs furnishing about one tuberculous ox in ten thousand killed.[5] From Tunis (Alix), Algiers, (Sarciron, Plaise), and Senegambia (Lenoir) a similar testimony comes. Cattle imported from Europe may die of tuberculosis, which is liable to assume a rapidly fatal type; but the native cattle, kept in the open air, are practically exempt.

Jersey cattle in their native island, staked out at pasture all the year round, show little or no tuberculosis, whereas the housed Jerseys of England and America suffer severely. The cattle of our Gulf Coast States, kept on ranches in the open air, are largely immune, and the cattle of Columbia, Ecuador, Peru, and the Argentine Republic largely escape; but the housed dairy cows of our southern cities show a very high ratio of consumptives. Consumption becomes more and more deadly in the southern negro even in the country localities, while the outdoor cattle of the same districts escape.

The absence of tuberculosis from the sanitarium herd at Saranac requires to be explained on a different basis. This herd is housed in winter, and infection, once introduced, would have opportunity to spread. The absence of tuberculosis is highly complimentary to the management of the establishment. But a similar immunity is the rule for all well-managed sanitariums, and not as regards cattle only, but man as well. At Argeles no case of tuberculosis contagion to attendants occurred in ten years (Ferrand). At Soden baths, in a village of 1500, there were in thirty-four years 65 deaths, 15 from consumption (Hopt). At Falkenstein, in fifteen years, one attendant became tuberculous (Jousset). At Görbersdorf the cases of consumption in the village and environs decreased (Knopf). At Brompton, London, in thirty-six years, among 150 attendants, but one became consumptive, though they individually served for from fifteen to twenty-four years, and nearly

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[5] Danzon. Etudes Expérimentale et Cliniques sur la Tuberculose, vol. i, p. 350.

40,000 patients had been received.[6] A well-conducted sanitarium is and should be a safer place than the average community, in which 15 per cent. and upward are tuberculous. The educational influence of such an institution should decrease tuberculosis in the surrounding districts.

Cases of direct infection from man to ox. Chauveau induced tuberculosis in cattle by feeding the tubercle from the lungs of man.[7]

Nocard relates that a Beauce farmer, with a finely appointed stable and healthy herd, in 1883 employed a dairyman who had a cough, profuse expectoration, and occasional hæmoptysis, and who had been several times in the hospital in consequence. He slept in the cow stable directly over the cows. In 1886 two cows, stalled immediately beneath him, showed ill health and were put up to fatten, but did badly and showed extensive tuberculosis when butchered. The dairyman stayed until 1891, having to go to the hospital several times in the interval. In 1892 the tuberculin test was applied and seven more cows were found to be tuberculous.

Huon tells of a cow brought to furnish milk for calves used to raise vaccine. She stood the tuberculin test, and was carefully secluded from all other cattle, but soon began to fall off, and in six months was very much emaciated, responded to the tuberculin test, and when killed showed extensive tuberculosis. Her caretaker at the vaccine establishment had what was believed to be chronic bronchitis, but when he died, soon after, this was found to be extensive pulmonary tuberculosis.

Bollinger inoculated a three-months' calf with liquid from human tubercle and killed it seven months later. Fibroid pedunculated tumors, from a pea to a walnut in size, hung from the mesentery and spleen, and the mesenteric and retroperitoneal glands were tubercular.[8]

Sidney Martin furnishes the following: Four calves were fed 70 c. c. of sputum containing a large number of bacilli. Three

[6] Etudes Expérimentale et Cliniques sur la Tuberculose, vol. iii, p. 408.
[7] Arloing. Tuberculosis Congress of 1891.
[8] Münchener medicinische Wochenschrift, 1894.

were killed after four, eight, and twelve months respectively, and had severally 53, 63 and 13 nodules on the small intestine, mostly on Peyer's patches. Two calves received at one dose 440 c. c. of tuberculous sputum, and were severally killed after eight and nineteen weeks. The first had tubercular nodules in the intestine and mesenteric glands.[9]

Frothingham injected into the peritoneum of two calves, three and thirteen weeks old, a culture of tubercle bacilli isolated one year before from the liver of a child. Slight local nodules were produced, some like spontaneous tubercle, others granulation tissue.

Theobald Smith inoculated sputum into the chest and abdomen of the following:

1. A yearling heifer, which was killed two months later and showed on the pleura near the seat of infection a mass of tubercles one by one and a half inch in diameter, with partly caseated centres; also a nodule one-eighth of an inch on the right lung, and small tubercles attached to the diaphragm and omentum.

2. A yearling injected in the same way showed in two months on the diaphragm a mass of tubercles two inches in diameter, and a second mass one inch in diameter on the ribs near the seat of infection. Microscopical examination failed to detect bacilli, but there is no evidence that they were sought by culture or inoculation.

3. A cow injected in the chest and killed after two months showed tubercles of the lungs, pleura, and mediastinal glands, partly caseated and containing bacilli. Vascular fringes hung from the pleura.

4. A cow receiving a chest injection of sputum culture and killed in two months showed fringes and pendulous masses on the pleura, with small tubercles containing cheesy matter and a few bacilli.[10]

Crookshank injected tubercular sputum into the peritoneum of a calf, which died of streptococcus infection on the forty-second day. It showed extensive tubercular deposits in the seat of injec-

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[9] Report of Royal Commission of 1895.
[10] Journal of Experimental Medicine, 1898, vol. iii, p. 482.

tion and an abscess the size of a walnut. Nodular fleshy neoplasms in hundreds studded the mesentery, omentum, liver, spleen, and diaphragm, and small tubercles disseminated through the lungs and liver contained tubercle bacilli. Three abscesses contained streptococci.[11]

The experimental inoculations of cattle with sputum by T. Smith, Kruse, and Adami showed a decided lack of potency in the bovine system, but (1) they do not show that the germ at once perishes in the system of cattle; (2) they do not prove that this germ, if returned from the ox to man, would prove less pathogenic than if carried from man to man without the intervention of the ox. (3) The observations of Bollinger, Baumgarten, and Crookshank show that under certain conditions the sputum bacillus can and does produce generalized tuberculosis in cattle. (4) Any diminished pathogenesis of the germ when passed from man to cattle is no guarantee that this germ, or the slightly modified germ of casual bovine tuberculosis, will prove equally mild if transferred from the bovine to the human patient.

Cases of infection of man from ox. Tscherning of Copenhagen, attended a young veterinarian who had cut his finger in dissecting a tuberculous cow. The skin wound healed in three weeks, but a subcutaneous swelling persisted, an ulcer formed, and a tuberculous mass containing bacilli was removed. No secondary tubercles formed.[12] A parallel case occurred to a prominent American veterinarian. The diseased tissue was excised and the bacilli identified by the bacteriologist of the university with which the patient was connected, and a permanent recovery ensued.

Pfeiff of Weimar, attended a veterinarian who had been similarly inoculated from a tuberculous cow. The patient, aged 34 years, had a good constitution and no tuberculous taint. The cutaneous lesion healed, but six months later there was tuberculosis in the cicatrix; pulmonary tuberculosis followed, and the patient died

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11 Transactions of the Pathological Society of London, 1891, p. 332.
12 Nocard. Dictionnaire de Med. Veterinaire. Article, Tuberculosis.

of this two years later. At the necropsy were found tubercular arthritis of the wounded thumb and many vomicæ in the lungs.[13]

The post-mortem wart (tuberculosis verucosa cutis) is familiar to surgeons as occurring in butchers and tanners, and there is every presumption that in many cases this is of bovine origin (Martin du Magny, Hanot, Senn, Riehl, Paltauf, Osler). Gerber testifies that in exceptional cases this extends to the lymph-glands and becomes generalized.

Dr. Stang of Amorbach, had a five-year-old, finely developed boy patient, of healthy parents, destitute of hereditary taint. He died after a few weeks' illness with miliary tuberculosis of the lungs and enormously enlarged tubercular mesenteric glands. The cow which supplied his milk had been killed a short time before with pulmonary tuberculosis.[14]

Dr. Demme of the Children's Hospital, Berne, had four infants, the offspring of sound parents, with no hereditary taint of tubercle, die of intestinal and mesenteric tuberculosis, having been fed on the milk of tuberculous cows. Among 2,000 tuberculous infants treated in twenty years these were the only ones in which he could exclude the probability of hereditary and other causes.[15]

Mr. Howe, of North Hadley, Mass., lost a son aged 20 months, from abdominal tuberculosis, three months after he had paid a week's visit to his uncle and had been fed the milk of the uncle's tuberculous cow. The cow showed at death generalized tuberculosis. The child had been strong and well, as were his parents.

The four-year-old son of Colonel Beecher of Yonkers, died March, 1894, of tubercular meningitis, and the two Alderney cows which had supplied him with milk were then proved consumptive by the tuberculin test and post-mortem examination.[16]

The child of Dr. Brown, U. S. A., and now of Cornell University Medical School, was similarly cut off by tuberculosis, having been fed on the milk of a tuberculous cow.

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13 Zeitschrift für Hygiene, Band iii.
14 Lydtin. Veterinary Congress, Brussels, 1883.
15 Nocard. Dictionnaire de Med. Veterinaire. Article, Tuberculosis.
16 New York Sun, March 29, 1894.

Dr. C. H. Peabody had a child patient die of tubercular meningitis three months after the family cow had been killed for generalized tuberculosis. There had been previously no tuberculosis in the family (Ernst, *Infectiousness of Milk*).

A. H. Rose of Littleton, Mass., gives the case of a child which was fed for three years on the milk of a tuberculous cow and died with abdominal tuberculosis (Ernst).

Gordon of Quincy, Mass., records the case of a ten-months-old child of healthy parents and ancestry which had been fed on the milk of a cow with advanced tuberculosis, and which died after a few weeks with acute tuberculosis (Ernst).

Gage of Lowell, Mass., had an infant patient of healthy parents and surroundings, but which subsisted exclusively on a cow's milk which contained bacilli and which infected guinea-pigs. The child died of tubercular meningitis. A second child fed the same milk suffered in a similar way (Ernst).

Andersen of Seeland, reports the death from tuberculosis of a six-months-old child which had been fed on the milk of a cow having tuberculosis of the udder. The mother developed symptoms of tuberculosis after the death of the child.[17]

Dr. Gosse of Geneva, Switzerland, spent his Sundays with his family on an estate in the hills, and his daughter, aged 17 years, took great pleasure in drinking milk warm from the cows. Early in 1893 she sickened with an obscure illness, and after ten months died, revealing at the necropsy intestinal and mesenteric tuberculosis. The five cows on the estate were tested with tuberculin; four reacted, and were killed; two showed tuberculous udders (Nocard).

Dr. H. M. Pond reports four cases of tuberculosis in one family, three of them fatal. The cows supplying the family with milk were tuberculous.[18]

Dr. Faust, veterinarian, of Poughkeepsie, records the case of a family on Long Island that lost from tuberculosis 139 cows. A

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17 Hatch Experiment Station, Massachusetts Agricultural College, Bulletin No. 3.

18 Pacific Medical and Surgical Journal, 1888.

three-year-old child and two grown sons died of tuberculosis. Tuberculosis was unknown in the parents' families.[19]

Dr. Kelly, veterinarian, Albany, gives the following: In a family of five a son, aged 19 years, was very fond of milk and drank it fresh from the cow, and contracted tuberculosis. Some months later the farm herd of seventeen registered Jerseys were tested with tuberculin, and thirteen reacted and showed extensive tuberculosis when killed.

Dr. Cooper, veterinarian, Paterson, N. J., furnishes this: A child, fed on the milk of a cow, contracted tabes mesenterica. Examination revealed the presence of tubercle bacilli in the milk. The milk was then fed to ten kittens, all of which became ill and emaciated, and when killed showed tuberculosis.

Such cases, in connection with the experimental inoculations, furnish more than mere circumstantial evidence. They are corroborated and strengthened by the very uniform diffusion of tuberculosis in man and stalled cattle in practically all civilized countries. Of the closer connection in individual cases one or two instances may here be added as drawn from personal observation:

1. In one case a family cow and the owner's wife had both advanced tuberculosis. The lady consumed a good deal of the cow's milk, but when she gave up its use she felt decidedly better.

2. The owner of a thoroughbred herd of sixty head had suffered for years from consumption, and attributed the poor condition of the animals to lack of care since he had been laid aside. Without the tuberculin test I diagnosed tuberculosis in 59 of the animals.

3. In a second thoroughbred herd there never lacked one or two cases of advanced tuberculosis, and the eldest son of the family, who was fond of milk and vegetable food, contracted pulmonary tuberculosis, and had to seek a permanent change of climate.

4. A dairy of common cows had seventeen out of twenty-six destroyed for tuberculosis, and the farmer's wife, father-in-law, and two brothers-in-law had shortly before died of consumption. The

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[19] Report to the State Board of Health.

wife felt ill in the close house air, and with her father occupied herself much about the cattle.

5. A veterinary professor, who was meat inspector of the city abattoir, died a few years ago of tuberculosis, which he handled so constantly in his daily duties.

Increased mortality from tabes mesenterica. In his Harben lectures the late Sir Richard Thorne pointed out that a better sanitary system in England had, in the space of forty years, led to a notable decrease of mortality from tuberculosis, phthisis in particular having for certain ages undergone a reduction of 60 per cent. Against this he places the testimony of the vital statistics that in children under a year old tabes mesenterica had increased by about one-third (3169 to 4462). Nursing with the bottle is doubtless much more common than it was forty years ago, yet it seems incredible that this enormous increase could have come from this alone. Until the increase can be more satisfactorily explained it may be well to keep our eyes open to the facts and ascertain how far the nursing-bottle and cow's milk are the real etiological factors.

The systematic introduction and propagation of tuberculosis in the bovine herds of New York. In concluding this paper I wish to refer to a condition of the cattle trade of New York which cannot fail to lead to a material increase of tuberculosis in the herds of this State. Canada, Massachusetts, New Jersey, and Pennsylvania, of adjacent States, and Illinois and Kansas, of those that are more remote, refuse to admit milch cows unless they have recently successfully stood the tuberculin test. The result can be imagined:

1. Cows from the west are shipped to Buffalo and other New York markets, and there put through the tuberculin test. Those that successfully pass the test are sent on into the self-protecting States named, while those that fail to bear the test are left to be disposed of to New York dairymen. These tests are not made by New York officials, as such, and we have no law that reaches the case.

2. If cattle are bought in New York herds to be taken into one of the adjacent self-protecting States they must first be subjected to the tuberculin test, and those only that stand the test can be shipped. This leaves the infected animals in the home herd, and as the herd has been reduced by the shipment, the proportion of tuberculous animals is increased and the concentration of tuberculosis has been effected. It is a mere question of the number and size of successive shipments when there will be none but tuberculous animals left in the herd, and when reinfection will lead to many generalizations of the disease.

3. Stock owners in adjacent States whose herds have been invaded by tuberculosis are placed under the strongest temptation to have their cattle subjected to the tuberculin test and to ship the reacting ones into New York, which stands with open arms ready to welcome them.

If the most malignant enemy of the cattle industry of New York, with its 2,131,392 head of cattle and its 663,917,240 gallons of milk product, had set himself to devise a means to ruin the great industry, and incidentally to diffuse tuberculosis in our population, could he have hit upon one better calculated to effect his purpose?

Last winter I drew a bill to correct the evil and had it introduced into the Senate, but the cattle-dealers and commission men of Buffalo were powerful enough to prevent a favorable report. The bill was left in committee. It remains to be seen whether the medical men, sanitarians, and philanthropists of New York; whether the outraged live-stock owners; whether the political economists of the commonwealth, will demand that this great evil shall cease.

Certain it is that so long as other States continue to legislate tuberculous cows into our herds, and we raise not a finger to prevent it, all our time and expense directed toward the suppression of bovine tuberculosis will be in the main a waste of public money. The noxious weed cannot be rooted out so long as we protect it by

weeding out the healthy crop which would contest its possession of the soil and at the same time foster it by sowing fresh seed of the obnoxious plant that has been ripened elsewhere. If it were not so serious there is something positively ludicrous in a legislation which is ostensibly aimed to secure the restriction or extinction of bovine tuberculosis, and parallel with this a positive refusal to consider and oppose a vicious line of trade by which our herds are being filled up by the tuberculous animals from other States and culled of the sound animals for the benefit of sister commonwealths.

The crying need of New York to-day is a measure which will shut out these streams of infection for beast and man and pave the way for a rational attack on the infection now resident in our home herds.

The next essential is that there should be placed prominently in the direction of such work one or more experts in the diseases of domestic animals, who have made a life-study of these subjects, and who will bring world-wide knowledge and individual skill and training to the service of our stock-owners and the protection of the public health.

THE PREPARATION OF TUBERCULIN, ITS VALUE AS A DIAGNOSTIC AGENT AND REMARKS ON THE HUMAN AND BOVINE TUBERCLE BACILLI.

BY VERANUS A. MOORE, B. S., M. D.

The hope formerly entertained that tuberculin, or, more correctly speaking, Koch's old tuberculin,[1] possessed a specific therapeutic value has been dissipated in the realization of the fact that its unquestioned usefulness is that of a diagnostic agent. While its character and properties are generally understood by the medi-

[1] It is important not to confound the old tuberculin which was discovered by Koch in 1890, with the new tuberculin described by him in 1897. For a brief description of this new product, see appendix.

Maragliano (Berliner klinische Wochenschrift, May 1, 1899) describes a watery extract of tubercle bacilli which he calls "aqueous tuberculin."

cal profession, there are still those who doubt the experimentally tested and practically demonstrated possibilities of this substance. Of the bacterial products which in recent years have come into prominence, few, if any, occupy a place, either in human or comparative medicine, where an accurate and wide-spread knowledge of the conditions limiting their effectiveness is more urgently demanded than for tuberculin. The important position it holds in sanitary medicine and the powerful agent it may become in the hands of those who have to do with bovine tuberculosis emphasize the necessity of such a knowledge.

Within the limits of this paper it will be impossible to discuss in detail the numerous questions which naturally suggest themselves in the effort to give an account of the present knowledge of tuberculin, as to what it is and what it will do. I propose, however, to treat somewhat fully of the more essential features in its preparation and in its use; which, if thoroughly understood, seem sufficient to answer many of the objections to its employment as an aid in detecting tuberculosis in cattle. Much of the honest opposition to its use, in this State at least, seems to come from a lack of definite knowledge of its true nature and powers.

At the outset it is important to note that we are dealing with a problem in which the chief factors are unmeasured, and, to a certain degree, unmeasurable vital forces. In the very beginning we are confronted with the manifestations of life itself. The problem is one in biology, where unexpected deviations may occur as a natural, though unexplained, result of the immediate conditions of life. If this fundamental principle is taken into account it will teach us that many of the objections to tuberculin which have been held up as insurmountable because they were not immediately explained to the satisfaction of the objector, cannot, from the very nature of things, be explained until we have more knowledge of the mysterious processes of life and disease.

Tuberculin, as we know it to-day, is the concentrated liquid, usually glycerinated bouillon, on which tubercle bacilli have

grown until they will grow no longer — that is, the products resulting from their multiplication and imparted to the medium have inhibited their further development. It is not definitely determined just what these products are or just how they are elaborated. Briefly stated, the preparation of tuberculin consists of the following procedures, viz.:

1. The preparation of the culture medium, distributing it in suitable flasks and inoculating it with the growth from a pure culture of tubercle bacilli.

2. The flasks are placed in an incubator at a temperature of about 37° C., where they remain until the growth ceases. The length of time necessary to accomplish this depends upon the age and condition of the culture from which the inoculations were made. From four to ten weeks are usually required.

3. After the maximum growth is attained the cultures are sterilized by heat, either by boiling in a closed water-bath or heating to a higher temperature in an autoclav.

4. After sterilization the cultures are filtered to remove all of the dead bacilli, and then the filtrate is evaporated to the desired degree of concentration over a water-bath.

5. The concentrated liquid is passed through a Pasteur or Berkefelter filter, standardized, bottled for distribution, and labelled with the name, quantity, and size of dose. It should be perfectly clear, although the color may vary. If it is cloudy it should be rejected when received.

A careful consideration of these various procedures assures one that each and every step requires skilled attention. It is logical, at least, to presume that if each part in the process is not carefully looked after the product may, to that extent, be unreliable. Of the possible errors in its preparation the danger of using too young cultures — that is, before the required degree of saturation of the bacterial products takes place — is, perhaps, the one most apt to occur. For example, if the flasks of bouillon are inoculated from an old culture, several weeks may elapse before the

new growth begins; but if a young, growing culture is used, it begins at once, or, better, continues with but slight interruption, as in the mother flask. However, unfavorable conditions of medium or temperature may retard these growths. It is usually the delay in getting the tubercle bacilli to begin to multiply in the newly inoculated medium that causes the variation in the length of time necessary to incubate the cultures before they contain the proper amount of the tuberculin elements.[2]

If the method of preparation is further examined it will be seen that tuberculin cannot possibly contain living tubercle bacilli. It is heated, on two occasions, to a temperature and for a length of time far in excess of that required to destroy the bacilli, besides being passed through a filter capable of removing all bacteria. It is a physical impossibility, therefore, for tuberculin which has been properly made to cause tuberculosis. Whatever physiological disturbances it may excite, it cannot impart that which it does not possess, namely, the *contagium vivum* of the disease.

The original tuberculin or lymph of Koch was concentrated to one-tenth of the volume of the saturated cultures. This gave a thick, syrupy liquid, owing to the presence of the glycerine. The diagnostic dose which came to be recommended for cattle of medium weight was 0.25 c.c.[3] On account of its consistency as well as the minuteness of the dose it was found to be practicable to dilute this quantity with seven parts of a diluent. A weak solution of carbolic acid was ordinarily used. The difficulties and dangers involved in making the dilutions in the field[4] led to the

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2 The occasional reports of poor tuberculin may be explained in this way: Early in my experience with tuberculin, a quantity was made from vigorous cultures that had been incubated for the full time. When it was tested it failed to give a reaction. Upon seeking an explanation, the notes showed that the growth in the flasks taken was retarded for three weeks and very feeble for two more. Subsequently an excellent tuberculin was made from the same original culture.

3 Dr. Kinnell of Pittsfield, Mass., has reported equally good reactions with two-thirds of a minim. (Journal of Comparative Pathology and Therapeutics, 1894, vol. vii, p. 182.)

4 Dr. Cooper Curtice gave detailed directions for making the dilutions in the field, as well as for the test generally, in the Annual Report of the Bureau of Animal Industry for 1895–1896, p. 283.

method of diluting the tuberculin in the laboratory before sending it out. This has been the practice of the Bureau of Animal Industry[5] for a number of years. Equally good results are obtained by concentrating the saturated culture to the point where 2 c.c. contains an equivalent of the 0.25 c.c. of the highly concentrated lymph. This process avoids the necessity of dilutions, and with the additions of a few drops of carbolic acid the weaker solution keeps perfectly.

The questions which perplexed us a few years ago concerning the virulence of the tubercle bacilli to be used in making an efficient tuberculin have for the greater part been answered. Trudeau, Baldwin, and de Schweinitz have experimented in this line, and have published to the effect that attenuated, non-virulent tubercle bacilli will produce quite as strong a tuberculin as the more virulent forms. Thus, Trudeau and Baldwin[6] obtained from non-virulent tubercle bacilli tuberculin of such strength that 0.10 c.c. usually killed six weeks' tuberculous guinea-pigs. In a more recent article Trudeau[7] makes this important statement: "My own observations so far have tended to the belief that as efficient a tuberculin can be made from attenuated as from virulent cultures; but as the non-virulent cultures grow generally more luxuriantly, it may be that they produce more toxin, though of less potency, while the virulent germs elaborate a more toxic product, but less in quantity." E. A. de Schweinitz[8] states that "attenuated tubercle bacilli[9] did not lose the property of producing or secreting the active principle of tuberculin."

Concerning the source of the bacilli used in making tuberculin, it seems that cultures of the human, or sputum, bacillus are ordi-

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5 E. A. de Schweinitz (Year-book of the United States Department of Agriculture for 1898, p. 111). He gives in this article a detailed account of the method of preparing tuberculin and the results obtained from the thousands of doses which have been distributed by the Bureau.

6 American Journal of the Medical Sciences, December, 1898, January, 1899.

7 Johns Hopkins Hospital Bulletin, 1899, vol. x, p. 121.

8 Loc. cit.

9 These bacilli were attenuated in 1893 (original description in Medical News, December 8, 1894), and have been used since that time, he states, "with great advantage both in preparing tuberculin and in immunizing animals against virulent tubercle bacilli."

narily employed. Tuberculin has been made from the bovine bacillus in a number of laboratories, and I am told that no difference could be detected between it and that made from the sputum bacillus, in its efficiency. My limited experiments confirm these statements, although the bovine cultures, with which I have worked, grew more slowly and consequently required a longer period of incubation to produce a tuberculin of the same degree of potency.

Tuberculin in the dose necessary to bring out its diagnostic effects is absolutely harmless to a healthy animal. Thousands of observations which have been reported assure us of this fact.

Tuberculin is in daily use in every State in the Union, in Canada, and in every country in Europe, yet, so far as I can learn, not a single case of injury following its use in healthy cattle has been reported. Cases of septic infection following its use must be attributed to other causes. In tuberculous animals it produces a rise of temperature, which within certain limits follows a definite course, usually terminating in from eighteen to twenty-four hours after the injection. The temperature usually begins to rise in about eight hours, giving a steady but quite rapid elevation for from one to three hours, a continuous high elevation of from four to twelve hours, and a gradual decline. This is practically constant, be the rise moderate or extreme. In addition to the elevation of the temperature there is sometimes a marked nervous chill. Why we get this reaction[10] is not positively determined, and we need much more information upon this subject.

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[10] Trudeau (John Hopkins Hospital Bulletin, July, 1899) gives the following summary of the mechanism of the tuberculin reaction: "The most generally accepted theory at present in regard to it is, briefly, the small dose of tuberculin injected is a partly specific irritant both to tuberculous foci and to the susceptible organism in general. It produces intense hyperæmia of all tuberculous tissue in the body (local reaction), and as the result of this hyperæmia much toxin stored up in the tubercles themselves is thrown into the general circulation and produces fever and characteristic symptoms which go to make up what is termed 'a general reaction.' That these poisons stored up in the tubercles are in part, at least, derived from the dead or weakened bacilli has been shown by the experiments of Babes and Broca, who found that if two sets of rabbits be injected with equal quantities of living and dead bacilli, the latter react to the tuberculin test at a much earlier period than those

THE APPLICATION OF TUBERCULIN. The application of tuberculin in detecting tuberculosis in cattle, while simple in detail, is a matter of greater moment than is sometimes thought. To understand this fully necessitates a familiarity with the procedure and the tuberculin temperature-curve just described in reacting animals. In an appendix to this paper I have given the detailed directions for using tuberculin as recommended by the United States Department of Agriculture, by the Royal Veterinary College, London, and by Prof. Nocard of the Alfort Veterinary College, France. In brief, the methods may be summarized as follow:

1. The normal temperature of the animal to be tested must be determined. It is recommended that it be taken hourly or every two hours for the day preceding the test.

2. The tuberculin is injected subcutaneously in the side of the neck. Care must be taken that the syringe is sterile. (It is not necessary practically to disinfect the part, as cattle are quite refractory to the ordinary bacteria of the skin.) The size of the dose (from 0.25 to 2 c.c.) depends upon the preparation.

3. Beginning six or eight hours after the injection the temperature should be taken hourly, or at least every two hours, for fully three-fourths of a day.

4. During the time of testing, the cattle should be kept quiet, free from all exposure, and fed normally.

5. In case of reaction there should be a rise of at least 1.5° F. above the maximum individual normal temperature as determined

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inoculated with living germs. This hypothesis — that the general reaction is brought about by toxins already stored up in the tuberculous lesions and exploded, as it were, by the hyperæmia produced about these lesions as a result of the test injection of tuberculin — is borne out by the fact that a greater amount of albumose can be recovered from the evaporated urine collected during the reaction than was contained in the test injection; also by clinical observations which indicate that patients suffering from localized surgical tuberculous processes of limited extent, and where the vascular supply to the part is limited, require a larger test injection to produce the reaction than those who have extensive or scattered visceral lesions in highly vascular organs like the lungs." The reader is referred to this paper for a careful consideration of the vexed questions relating to tuberculosis.

on the preceding day. The elevation should come on gradually, remaining practically at its fastigium for a few hours, and gradually subside. Erratic elevations of short duration are to be excluded. In cases of doubt the animals should be retested.

6. Animals advanced in pregnancy and those known to be suffering from any disease or in œstrum should be excluded. All methods of treatment, including exposure to cold, kind of food and drink, which would tend to modify the temperature should be avoided. Animals in which the disease is well advanced sometimes fail to react.

7. The dose should vary to correspond with the weight of the animal. In cases of a second test within a few days the quantity of tuberculin injected should be larger than for the first test.

As the tuberculin reaction consists simply in a temporary hyperthermia, which is ordinarily thought to be easily determined, it is not infrequently stated that the precautions imposed in its application are too stringent. In the bovine species the normal temperature varies, in comparison with man, to a marked degree. In 1897 a series of temperature determinations on healthy animals were made under my directions by Drs. Howe and Ryder.[11] In cattle they not infrequently found a variation of 2°, and even of 3°, within twenty-four hours. Cold water, when drunk in considerable quantities, lowered the temperature from 2° to 4° (see chart). A temporary excitement usually caused an elevation of from 1° to 1.5° F. They found marked variations in the temperature of the same animal on consecutive days. The temperature (taken hourly for two weeks) at 12 noon and 12 midnight was often the same. In some cases the maximum elevation occurred near midnight, and on the following day the minimum temperature would appear at that time. It was not uncommon for the maximum temperature to occur twice a day and occasionally several times within the twenty-four hours. There was marked

[11] Theses for the degree of D. V. M. from the New York State Veterinary College, 1897, deposited in the Cornell University Library.

individual variations in the effect of ordinary conditions upon the temperature, such as food, excitement, and temperature of the air. A hot spell (temperature 90° F.) caused a rise of 2°, and in some cases 4°. The average temperature of the animals in the three herds tested was 102.5°, 102.6°, and 101° F. respectively.

In a well-kept government herd that was tested with tuberculin the temperature of part of the animals was taken hourly for twenty-four hours and a part of them for sixteen hours (7 A. M. to 11 P. M.) preceding the injection. An examination of the records[12] shows the average daily variation of twenty animals in which the temperature was taken for twenty-four hours to be 2.31° F. The maximum individual variation in a single day was 4.3° F., the minimum 0.5° F. In twenty-five others, where the temperature was taken for sixteen hours, the average variation was 1.79° F. In these the maximum variation was 3.2° F., the minimum 0.6° F. Ten healthy animals (did not react to tuberculin) in the same herd gave an average variation of 2.08° F. In these the maximum variation was 4.1° F., the minimum 1° F. The lowest temperature was usually, but not invariably, in the morning, and the highest in the afternoon or evening. I have appended the records of the temperature of two of these animals:

THE INITIAL TEMPERATURE OF TWO COWS.

	No. 319.[13]			No. 318.[14]		
	Temp.	Pulse.	Resp.	Temp.	Pulse.	Resp.
9 A. M.	99.8° F.	48	18	99.8° F.	48	15
10 "	99.5	66	18	98.6	60	15
11 "	99.0	60	15	99.0	60	15
12 M.	100.8	54	15	99.4	54	15
1 P. M.	101.4	54	15	100.0	54	18
2 "	101.6	48	15	100.2	54	18
3 "	102.0	60	24	101.4	72	24
4 "	103.0	66	24	102.7	72	24

[12] Bulletin No. 7, Bureau of Animal Industry, U. S. Department of Agriculture, Washington, D. C., 1894. The tests were made under the direction of Dr. Theobald Smith by Drs. F. L. Kilborne and E. C. Schroeder.

[13] Did not react.

[14] Gave a maximum reaction of 107.4° F.

THE INITIAL TEMPERATURE OF TWO COWS — *Continued.*

	No. 319			No. 318.		
	Temp.	Pulse.	Resp.	Temp.	Pulse	Resp.
5 P. M.	103.3	66	24	102.8	72	27
6 "	103.1	57	18	103.0	60	27
7 "	102.2	60	20	102.4	66	24
8 "	103.0	56	16	102.0	60	24
9 "	103.1	52	24	102.2	60	24
10 "	102.5	60	20	102.0	56	18
11 "	102.5	60	20	102.0	60	20
12 midnight	102.4	56	16	101.6	64	20
1 A. M.	101.8	60	20	101.4	56	24
2 "	102.0	64	18	102.2	52	18
3 "	102.0	60	18	101.6	56	18
4 "	102.2	54	24	101.5	60	24
5 "	101.6	56	24	102.0	60	18
6 "	101.8	60	18	102.2	72	20
8 "	102.5	56	16	103.2	60	18

With a knowledge of these normal variations, which often exceed the tuberculin reaction, it is obvious that before applying the test the normal temperature of the animals should be approximately determined, and when they are being subjected to the test they should be cautiously protected, otherwise the comparatively slight elevation necessary to detect the disease may be disguised.

As the reaction seems to be the result of an affinity existing between tuberculin and a living tuberculous lesion, it is natural to suppose that when the two are brought together in the same animal it would invariably take place. Experience has shown that it almost always does. It is important, however, that we understand as far as possible the reason for the exceptions and the extent to which they occur. Exceptions or errors in the tuberculin test fall into two classes, viz. (1) where there is a reaction and no disease is found, and (2) where there is no reaction and the disease exists.

In explaining the first of these alleged errors the records of the cases which have come to my attention have been so deficient in

data concerning the normal temperature variation of the animal and in the completeness of the post-mortem examination that I have felt the probability that the error rested with the observer quite as much as with the tuberculin. Unfortunately, we are yet unable to determine, by the reaction, the extent of the disease, so that a beginning lesion no larger than a pea may cause a pronounced rise of temperature, and such a tubercle may be difficult to find, especially if located in the marrow of some bone. As to the second class, it is generally admitted that advanced cases often fail to react; but here the test itself is of little importance, as the disease can be detected by an ordinary clinician on physical examination. The occasions are quite numerous where this has happened. A reaction may not occur in rare cases where the disease is recent and active. Medical science recognizes individual idiosyncrasies in respect to the action of other specifics, and all laws in the biological world admit of exceptions and variations. Why, then, should tuberculin and the tuberculous animal be debarred from this universally acceded privilege? When, however, tuberculin is carefully prepared and scientifically administered these exceptions are exceedingly rare. I have no personal knowledge that they ever occur.

The practical value of tuberculin, however, lies in its efficiency in the arts of comparative and sanitary medicine. It is in the practical application that difficulties are encountered. The many details and precautions enumerated as absolutely essential to the best results are often considered too tedious and time-consuming, and, consequently, the practice has come too generally into vogue of neglecting or ignoring many of these instructions. In order that the test may be practicable it seems to be necessary to resort to the shorter method, even at the risk of an occasional failure. Moreover, the reaction is usually so well marked that the disease can nearly always be detected by the usual procedure. If, however, a diseased animal escapes by virtue of neglecting precautions in making the test, the error is chargeable to the method and not to the tuberculin.

As tuberculin is a commercial product, it can be procured and used in private practice by those who are not competent, professionally, to do so. It is the errors incident to ignorance, or, worse, deliberate deviations from truth, that have led to most of the charges against its use. Tuberculin cannot give knowledge to the ignorant or virtue to the corrupt, but, like other chemical reagents, when the conditions are right it produces its specific effect. It is the task of the tester to see that this effect is differentiated from somewhat similar manifestations which may arise from other causes, and that its reaction is accurately recorded. Tuberculin cannot disclose irregularities, but if it is put in the hands of those who know its powers and how to use it, it will take a knave indeed to prevent its reaction or to disguise the same from him who applies it.

If we exclude, as we should, the objections to tuberculin due to the deliberate intention to deceive, and again search the records, we find that even the unskilled and often careless user obtains most remarkably accurate results. Omitting practically all of the precautions enjoined, and following the shorter procedure of most practitioners, we cannot find positive evidence of 5 per cent. of error. When but one initial and but three or four subsequent temperatures are taken and little or no attention is paid to the other influencing conditions, an error of not more than 5 or even of 10 per cent. speaks in unmistakable terms for the efficiency of this agent.

Tuberculin has been thought to be inefficient because in certain dairies where it has been used and the reacting animals removed the disease has subsequently appeared. In all such herds of which I have knowledge there is a reasonable explanation for such a recurrence in one or more of the three following conditions, viz.: (1) The advanced cases which did not react were not detected on physical examination and removed, or (2) the disinfection of the premises was imperfectly done, or (3) certain animals may at the time of the test have been infected, but the lesion or tubercle not

yet developed. It is not yet determined how long a tubercle bacillus may remain on the mucous membrane or in the tissues before it begins to multiply, but undoubtedly a number of days may intervene. It is not claimed that tuberculin will produce a reaction during this period of incubation. On account of these possible conditions it may be necessary to apply the test a second or even a third time before all traces of the disease can be detected and the infected animals removed.

Its use as a protection in introducing new animals has been questioned on the ground that a single dose produces immunity, so that an unscrupulous owner could protect his animals against the legal test. Concerning this point, Dr. Leonard Pearson[15] writes: "As to the failure of animals to react a second time after they have been tested with tuberculin, I would say that such a failure is distinctly exceptional. Recently a herd of cows was tested in Philadelphia by an agent of the city board of health; eighteen cows reacted. The herd was tested again within ten days by an agent of the Live-Stock Sanitary Board, and the same eighteen cows reacted. A double dose of tuberculin was used for the second test." The records of repeated injections within very short periods are not numerous. We have already made a few such tests and others are in prospect, so that it is hoped that very soon we may have satisfactory data on this point. Three consecutive injections within ten days in a young animal (three months) gave a decided reaction each time. The dose was 0.25 c. c. of the diluted tuberculin. A fourth injection failed to give a reaction. A second case gave like results. A cow failed to react on the fourth test. At post-mortem she showed extensive lesions in the lungs, mesentery glands, and intestines, and the mucus in the throat and trachea contained innumerable tubercle bacilli. Nocard has said that "about 10 per cent. of the tubercular cows that react to the test will fail to react to a second one if it is made within one month, and then after each test about 10 per cent. more will

[15] A private letter to the writer bearing date of January 4, 1900.

fail to react to the following one." Pearson believes that this represents about the true proportions. The records available indicate that a 10 per cent. failure on second test is somewhat high. It has been quite clearly shown, however, that by increasing the size of the dose, which can be done with impunity, the resulting resistance from a single dose can be overcome.[16] It is possible that rarely a tuberculous animal could escape under such a temporary immunity; but if a second test was applied a few weeks later the purchaser could be reasonably assured against the disease.

The value of tuberculin is now no longer questioned by those who have come to a knowledge of its searching diagnostic powers and harmlessness to healthy and diseased animals. The cattle owners who, through their veterinarians, have used it privately and who would bear witness to this statement are very numerous. In the State of Pennsylvania, where the percentage of tuberculous cattle in infected herds has been reduced during the last few years from 25 to 11.6 per cent.,[17] and where within a month the people have demanded the reappointment of a veterinarian who has had the work in charge, the official application of tuberculin has been restricted to those who have been instructed and found to be qualified to use it. This fact bears evidence for the theory that in order to reduce the present errors of 5 or perhaps 10 per cent. to a minimum, efficient tuberculin must be administered by competent and honorable people only.

If we summarize the facts as they are, and the convictions of those who from experience have a right to express themselves on this important topic, we tend to these conclusions:

1. That properly made tuberculin, scientifically applied, will indicate the presence of active tuberculous lesions in practically every animal where the disease is not sufficiently advanced to be detected on physical examination. It is not infallible, but posi-

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16 Roux and Nocard (Recueil de Med., 1891) state that they have a tuberculin which will give reaction almost indefinitely. They have not, however, described its method of preparation.

17 Proceedings of the American Veterinary Medical Association, 1899.

tive proof of its failure under the conditions specified exists, at the most, in rare cases.

2. The available evidence does not indicate that over 5 per cent. of errors exist in interpreting its effects when applied, as it is now, by the ordinary practitioner and often by those unskilled in its use.

3. The majority of the objections raised to the use of tuberculin as a diagnostic agent have their origin in (1) the errors of the incompetent, (2) the victims of the unscrupulous, or (3) with those who seeing, refuse to admit the existence of tuberculosis as a specific disease.

4. Full information concerning the best method for its preparation, its composition, its mechanism in producing a reaction, and the reasons why in rare cases it may not give its specific reaction, are topics for further investigation.

5. The preparation and the application of tuberculin, while simple processes, involve a consideration of such a variety of conditions, nearly all requiring technical knowledge, that they should not be attempted or allowed to be performed except by those who are competent and qualified to do so.

BOVINE AND HUMAN TUBERCLE BACILLI. I was requested to point out the differences existing between the human and bovine tubercle bacilli. There are numerous popular statements to the effect that these bacilli are entirely different, and consequently there can be no intercommunication of tuberculosis between cattle and men. In view of the obvious injury these assertions are working to the cattle industry[18] by checking the active progress which was being made in detecting and eliminating tuberculous animals from the dairies of the State, to say nothing of the sanitary problems involved, it seemed desirable to make a few

[18] For nearly three years there was a gradual but steady increase in the demand for tuberculin for the private testing of cattle. The work of the tuberculosis committee in an educational way in getting farmers interested in the subject for their own benefit was beginning to bear much fruit. As soon, however, as the statements began to appear, especially in the agricultural papers, that these bacilli were distinct species and that the disease was not transmissible from cattle to man, the demand for tuberculin fell from over a thousand doses a month to practically none at all. More recently the demand has increased, so that this month we have received calls for nearly 500 doses.

remarks on this topic. The most I can hope to do, however, is to call attention to the results of certain investigations which have enlightened us on this subject, and which, unfortunately, have been charged with proving the specific distinction of these organisms.

From the time of the discovery of the tubercle bacillus in man and the lower animals until quite recently it was generally believed, and so asserted by the authorities on this subject, that the bacilli from different species of mammals were identical. It was not, I think, until Smith's publications[19] that doubts of a serious nature have arisen concerning the validity of these statements. The former opinions were based largely on the similarity in their general morphological characters, microchemical reactions, and the similarity in their pathogenesis for the susceptible guinea-pig. Contrary to the general belief, the cultivation of tubercle bacilli from tuberculous lesions in cattle or other animals has been a very difficult task. To obtain pure cultures of tubercle bacilli directly from tuberculous lesions was the fortune of but few bacteriologists until the development of the present method of isolating them, which was formulated and published by Theobald Smith,[20] in 1898. Since that time more attention has been given to this subject, and a comparative study of tubercle bacilli from different sources, especially from cattle and man, is being made in a number of laboratories. We have reason to expect, therefore, that within the next few years much new information concerning these organisms will be forthcoming.

At the present moment most of our knowledge on the subject of varieties or races of tubercle bacilli is contained in the papers by Theobald Smith. The high character of the work precludes the further unqualified acceptance of the former theory of the identity of tubercle bacilli, but it does not warrant the acceptance of the assertion, which those unfamiliar with such work have made, that

[19] (1) Transactions of the Association of American Physicians, 1896, vol. xi, p. 37. (2) Annual Report of the Bureau of Animal Industry, 1895–1896 (published early in 1897). (3) Journal of Experimental Medicine, 1898, vol. iii, p. 451.

[20] Journal of Experimental Medicine, 1898, vol. iii, p. 451.

they are entirely distinct species. Notwithstanding the numerous statements that human and bovine tubercle bacilli are entirely different species, there is nothing in the results of the investigations, thus far published to support such an extreme statement.

In order that we may not misconstrue the results of Smith's investigations and that we may not draw unjustifiable conclusions, I have appended his own statement concerning (1) the morphology and the cultural differences of these bacilli, and (2) the pathogenesis of the different cultures as tested on a variety of species of animals. He worked with pure cultures isolated from human sputum, tuberculous cattle, a horse, a cat, and a pig. For the details of these experiments, the reader is referred to the original article.[21]

"I. *Concerning morphology and cultures.* 1. Bovine and other animal bacilli (except *nasua*, which is regarded as coming from man) grew less vigorously for a number of generations than the sputum bacilli. Sputum I. is an exception, and is probably an atypical form. 2. Bovine bacilli are much less influenced by certain modifications of the culture medium. 3. Bovine bacilli tend to remain short; human bacilli are either more slender from the start or become so during cultivation.

"II. *Results of inoculations in rabbits.* The divergences noticed when rabbits, weighing between 1300 and 2200 grammes, are inoculated into an ear-vein with 0.5 c. c. of a well-clouded suspension of tubercle bacilli in bouillon are as follows: 1. Death of the bovine cases in seventeen to twenty-one days. 2. Rapid evolution and necrosis of the pulmonary tubercles, with very great increase of the tubercle bacilli in them. 3. Death of the sputum rabbits (one explainable exception) did not ensue, but, after one and a half to three and a half months, the original weight had been more or less exceeded. 4. The pulmonary tubercles in the sputum rabbit developed very slowly, with very little tendency toward necrosis. The bacilli were present in very small numbers only. 5. The swine and cat cultures are to be classed with the bovine; the horse cultures stand intermediate.

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21 Journal of Experimental Medicine, 1898, vol. iii, p. 451.

"III. *Results of last experiment in inoculating cattle with bovine and human (sputum) tubercle bacilli.* The points of difference between the inoculated disease produced by these bacilli are several. 1. The bovine cases either remained stationary in weight or lost slightly, while the sputum cases gained 75 to 85 pounds. Still, the age of one of the bovine cases may be partly responsible for stationary weight. 2. There was marked fever in the bovine cases for three weeks after the inoculation; practically none in the sputum cases. 3. There were well-marked differences in the lesions produced. In the sputum cases the lesions are nearly the same, and consist in: (*a*) A tumor in the right caudal lobe of the lung, about one inch in diameter, projecting somewhat above the surface of the lung. This represents the place where the needle penetrated into the lung tissue and deposited the tubercle bacilli. In each case the contents of this tumor were softened and converted into a curdy mass, enclosed in a thin-walled capsule, smooth internally. The disease was not spreading from this point, nor were tubercles visible in the lymph-glands of the lungs and thorax, excepting in one gland of No. 39 (Sputum V.). (*b*) The free margin of the right lung and the pleural covering of the ribs on the right side were beset with a new formation of loose vascular fringes or shreds, in which in only one case some minute nodules could be felt, and some flattish, pediculated masses, which did not resemble tubercles at all histologically, or which were only abortive forms of the same.

"Among the bovine cases we have the following characteristic points to note: (*a*) Disseminated tuberculosis of the lungs, severest and fatal in No. 71, the youngest; least pronounced in the oldest, No. 88. Associated with this a local, disintegrated focus in the lungs of No. 88. (*b*) Tuberculous deposits on the lungs, pericardium, diaphragm, and the ribs, resembling closely the products of the natural disease in cattle. Extension of the eruption to the costal pleura of the left side. (*c*) Extensive tuberculosis of all or nearly all the lymph-glands of the thorax, including both medi-

astinal chains. (*d*) Slight tuberculosis of other organs — spleen, liver, and kidney — in two out of three cases.

"A summary of the three separate tests on cattle (including the published experiment), in which twelve animals were used, shows that six animals were inoculated with human bacilli, five with bovine bacilli; one animal was inoculated with swine bacilli. Of the sputum cases, one showed no disease; two showed very slight lesions, three showed only local lesions without dissemination. Of the bovine cases, two died of generalized disease; two showed extensive lesions; one showed less extensive lesions. In the swine case the lesions were less extensive than in the bovine cases. In the guinea-pig few well-defined differences were found, owing to the great susceptibility of this species."

The most conspicuous differences between the human and bovine bacilli brought out by these experiments is the marked increase in virulence of the bovine over the sputum bacillus, especially for rabbits and cattle. This result has already been confirmed by Adami[22] and Pearson.[23]

In the light of these carefully determined differences the conclusions that there are varieties or races of tubercle bacilli cannot be gainsaid. In this respect, however, they do not differ from many other pathogenic bacteria.

Concerning the differences in morphology Pearson[24] writes: "As to the morphology, I would say that this can be changed materially by passing through a single animal. For example, if a culture of short, thick bacilli from the cow is used for inoculating the pig or the goat, the bacilli recovered after the death of the inoculated animal are, in some instances, longer, more slender, and frequently beaded."

Smith has made it clear that for certain animals the bovine variety of tubercle bacillus is more virulent than the human variety. If this is uniformly the case, as it seems to be, for nearly all ani-

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22 Canadian Journal of Medicine and Surgery, December, 1899.
23 Loc. cit.
24 Loc. cit.

mals, Pearson finding it so for the horse, goat, sheep, pig, dog, cat, guinea-pig, and rabbit, is it not possible that it is likewise more virulent for the human species? In a report on tuberculosis issued by the Council of the British Medical Association, January 18, 1899, the following statement is made: "The mortality from tuberculosis in early childhood is not decreasing as it is at other ages in the United Kingdom, and the opinion that this great prevalence of the disease in infancy and childhood is due to infection through the alimentary canal by milk from tuberculous cows appears to be well founded."

It is unwise to speculate upon the possibilities so long as there is hope that in the near future conclusive evidence may be recorded. We are growing in the knowledge of this important subject, and when the time comes we will know the truth. At present we have convincing proof of varieties among tubercle bacilli, but it never has been stated, so far as I can learn, by those competent to give an opinion, that human and bovine tubercle bacilli are specifically different.

APPENDIX.

I. Koch's New Tuberculin.

After the discovery of tuberculin Koch again turned his attention toward the discovery of a substance that should render the system immune to the bacilli themselves. He experimented for over a year with a normal natron lye extract of tubercle bacilli, which is designated as *tubercle antitoxin*. It was found that small injections of this substance produced results analogous to those of tuberculin, but that the effects lasted somewhat longer and were more certain. Larger doses produced abscesses at the place where the injections were made that could only be explained as being the effect of the dead bacilli contained in the preparation. The bacteria were completely removed by filtration, and it was found that no more abscesses were produced, but that the effects of the injections were in nowise superior to those of tuberculin. This discovery led Koch to the conclusion that as an abscess is invari-

ably caused by a certain dose it is impossible to render the system immune to the bacilli of tuberculosis by hypodermatic injections of the unchanged bacilli.

His subsequent efforts were directed toward the discovery of a method of breaking up the bacilli by mechanical means in order to facilitate their absorption. He had discovered in previous experiments that the bacteria of phthisis consists of two peculiar chemical components which belong in the category of under-saturated fatty acids. One of these acids is soluble in dilute alcohol, and is easily turned to soap by contact with natron lye; the other is only soluble in pure boiling alcohol or ether, and is very difficult to convert into soap. These fatty acids are shown by microscopical examination to form a cohesive and protective layer around the bacillus, which prevents its absorption. For some time the various attempts to destroy this protective coating failed utterly. It was only when the cultures were well dried and beaten in a mortar for some time that the number of bacilli commenced to decrease. To get rid of those that remained Koch placed the substance that had been beaten in the mortar in distilled water and subjected it to the action of a powerful centrifugal separator. The products obtained by this process were a white, opalescent, and completely transparent fluid, which contains no bacilli, and a slimy, viscous sediment. This sediment is subjected to the same treatment as the bacilli, and the above-described process is repeated until the entire sediment is dissolved into a series of clear fluids. Koch experimented with the fluids obtained, first upon animals and then upon human beings, and found that the first fluid possessed different qualities from the fluids that had been obtained by a repetition of the treatment in the centrifugal separator, all of which possessed identical qualities.

The fluid that had been subjected to the centrifugal separator once is designated tuberculin O or TO. The different fluids obtained by repetitions of the original process are designated as tuberculin R or TR.

The properties of tuberculin O are very similar to those of tubercle antitoxin, except that TO causes no abscesses. Tuberculin R has the important property of rendering the system immune to the different components of the tubercle bacillus. Koch demonstrated this quality of TR by a large number of experiments. Further tests by other investigators have thrown much doubt upon the high immunizing efficiency of this substance.

II. Directions for Using Tuberculin.

I. The regulations prescribed for many years by the Bureau of Animal Industry for the use of tuberculin in testing cattle are as follows:[25] The febrile reaction in tuberculous cattle following the subcutaneous injection of tuberculin begins from six to ten hours after the injection, reaches the maximum nine or fifteen hours after the injection, and returns to normal eighteen to twenty-six hours after the injection.

In conducting the test the following course is recommended to those who wish to obtain the most accurate results:

1. Begin to take the rectal temperature at 6 A. M., and take it every hour thereafter until midnight. 2. Make the injection at midnight. 3. Begin to take the temperature next morning at 6 o'clock, and continue as on the preceding day.

To those who have large herds to examine or who are unable to give the time required by the above directions the following shortened course is recommended:

1. Begin to take the temperature at 8 A. M., and continue every two hours until 10 P. M. (omitting at 8 P. M. if more convenient). 2. Make the injection at 10 P. M. 3. Begin to take the rectal temperature next morning at 6 or 8 o'clock, and every two hours thereafter until 6 or 8 P. M.

Each adult animal should receive 2 c.c. (about 30 minims) of the undiluted tuberculin as it is sent from the laboratory. Year-

[25] Dr. de Schweinitz. Year-book, U. S. Department of Agriculture, 1898, p. 111.

lings and two-year-olds should receive 1 to 1.5 c.c., according to size. Bulls and very large animals may receive 3 c.c. The injection is made beneath the skin of the neck or shoulders.

There is usually no marked local swelling at the seat of the injection. There is, now and then, uneasiness, trembling, and more frequent passages of softened dung. There may also be slight acceleration of the pulse and of the breathing. A rise in temperature on the day following the injection of 2° F. or more above the maximum observed on the previous day should be regarded as an indication of tuberculosis. For any rise less than this a repetition of the injection after three to six weeks is highly desirable. In rare cases the temperature may rise in the absence of any disease; it may fail to rise when tuberculosis is present.

It is hardly necessary to suggest that for the convenience of the one taking the test the animals should not be turned out, but fed and watered in the stable. It is desirable to make note of the time of feeding and watering.

II. The directions for using tuberculin issued by Prof. McFadyean,[26] from the Royal Veterinary College, London:

1. While under the tuberculin test cattle ought to be kept in the house, fed on their usual food, and protected from draughts. 2. The dose of tuberculin for a medium-sized cow is 3 c.c. or 50 minims, and it may be varied a little above or below that, according to the size of the animal. 3. It ought to be injected under the skin with a clean hypodermatic syringe. The most convenient points are in front of the shoulder or on the chest-wall beneath the point of the elbow. The best form of syringe is one with an asbestos piston, as the whole instrument may be sterilized by boiling it in water for five minutes before using. 4. The tuberculin must be injected into the subcutaneous connective tissue, and care must be taken that the whole dose is introduced. 5. The temperature must be taken at the time of the injection, and at the sixth, ninth, twelfth, and fifteenth hours afterward. 6.

[26] Legge. Cattle Tuberculosis, 1899.

Animals in which the temperature during the fifteen hours following the injection rises gradually to 104° F. or more may be classed as tuberculous, and those in which it remains under 103° F. as not tuberculous. When the maximum temperature attained is under 104° F., but over 103° F., the case must be considered doubtful, and the animal may be retested after a month. 7. The test is not reliable in the case of animals in the last stages of the disease or in those in which the temperature is over 103° F. before injection. 8. The tuberculin should be kept in a cool place and protected from the light. Should it become turbid or cloudy it must not be used. 9. The tuberculin test does not render the milk in any way injurious.

III. Recommendations for the use of tuberculin by Prof. Ed. Nocard, Alfort Veterinary College, France.[27]

1. Tuberculin possesses an indisputable specific action on tuberculous cattle, which betrays itself especially by noteworthy elevations of the temperature. 2. The injection of a strong dose, say 30 to 40 centigrammes, according to the size of the subject, generally causes in tuberculous animals a rise of temperature between 1.5° and 3°. 3. The same dose injected into healthy cattle causes appreciable febrile action. 4. The febrile reaction appears most frequently between the twelfth and fifteenth hour after injection, sometimes after the ninth hour, very rarely after the eighteenth, and always lasts several hours. 5. The duration and intensity of the reaction have no relation to the number and gravity of the lesions; it seems, even, that the reaction may be most distinct in cases where, the lesion being very limited, the animal has retained the appearances of health. 6. In very tuberculous subjects — consumptives in the true sense of the word — especially in those which are feverish, the reaction may be little marked or even absolutely *nil*. 7. It is wise to take the temperature of the animals morning and night for several days be-

[27] Nocard. Animal Tuberculosis, 1897.

fore the injection, as one may have to deal with animals who, under the influence of a temporary ailment or trifling pathological condition, such as disorder of the digestion, present great oscillations of the temperature; hence an important source of error. In the case of these animals it is better to postpone the operation. 8. In certain tuberculous animals which are not feverish the reaction following the injection of tuberculin hardly exceeds a degree. Therefore, as experience shows that in perfectly healthy animals the temperature may undergo variations of a degree and more, one must only consider, as having a real diagnostic value, reactions of more than 1.4° C. An elevation of temperature of less than eight-tenths of a degree has no meaning. Every animal whose temperature undergoes an elevation included between eight-tenths of a degree and one to four degrees must be considered under suspicion, and will have to undergo, after an interval of a month or so, a new injection of a larger dose of tuberculin.

To these conclusions the following must be added:

(*a*) Successive injections repeated daily, or at intervals of some days, give reactions gradually less intense. There is produced a veritable toleration of the action of the tuberculin. My experiments seem to establish that this toleration is very temporary. In the case of several tuberculous cows submitted to injections every fifteen days, every twelve days, or every eight days, I have registered, eight or ten times running, rises of temperature practically equal.

(*b*) The tuberculous calf reacts just as well as the adult; the dose should vary from 10 to 20 centigrammes.

(*c*) The injections of tuberculin have no troublesome effect on the quantity or quality of the milk or on the progress of gestation. This observation is the result of a considerable number of experiments made on cows in full lactation and at all periods of gestation.

Report of M. Quigley.

Hon. Chas. A. Wieting, *Commissioner of Agriculture:*

Dear Sir.— I respectfully beg leave to submit a report of my work from January 1, 1899, to this date:

On January third, I went to Mecklenburg, Schuyler county, where I had been informed that a flock of sheep, owned by D. E. Goldsmith, was infected with scab. I examined them and found a few lambs which appeared to be slightly affected. I recommended that all should be dipped, then drove to Trumansburg to look after a carload of sheep, which Doctor Kelly reported to be suffering from scab, and owned by a man named Edward Murphy, and had been collected from various farms in that locality. They were dipped in a solution of tobacco and sulphur in my presence.

On January thirteenth, I went to North Hector to see a flock of sheep that had been previously quarantined there for scab. I found they had been dipped twice, as directed from the department.

On March first, according to your instructions, I went to Buffalo to interview Doctor Zink, the United States government inspector, to learn how many sheep passed through this market, and to inquire if there was not some means whereby all sheep affected with scab, or those coming from an infected district, and to be sold into this State for feeding or breeding, might not be dipped. I found that the receipts and shipments of sheep from the Buffalo Stock Yards in 1897 and 1898 were as follows:

	Receipts.	Shipments.
1897	1,778,330	1,490,280
1898	1,582,610	1,429,260

From the above figures it can be easily seen that Buffalo is doing an enormous business as a distributing center. After submitting

my report to you in the matter, I am happy to state that acting under your instructions, the stock yard authorities have built the finest dipping plant in the United States, and it is now in full operation at a cost of three cents per head.

On March twenty-second, I went to Berkshire, Tioga county, to see if the milk from the cows which had been condemned, on account of tuberculosis, and owned by George Parsons of that place, was not being sold without being sterilized, as he was instructed so to do. I was informed that the milk was being sold to a creamery. I found this to be true, and drew Mr. Parsons' attention to the fact that he had been informed by Dr. Wm. Henry Kelly that he must not sell the milk from the tuberculous cows, without it being sterilized, and that the Department insisted this must be done. I visited his herd several times afterward, and up to July seventeenth, but always found that the milk was not placed on the market without being sterilized.

On August fourth, I was informed by you that rabies existed in Erie county, and I was directed by you to go there and keep you advised as to the situation. I was informed that probably the origin of the outbreak was May fifteenth. On this date a rabid dog appeared at Morton's Corners, in the southern part of the county. He bit several dogs there; some of them, it was said, developed rabies and were killed, and another disappeared after being bitten. About this time, also, and on May fifteenth, in the village of Sloan, adjoining the city of Buffalo, a rabid dog bit a boy named Otto Tresselt, and a man named T. B. Barry. The dog was killed, but, about August fourth, young Tresselt developed rabies and died on August seventh. Barry was immediately sent to the Pasteur Institute, in New York, but it was too late, and he died there in a few days. It also appeared that on July fifteenth a dog, owned by one Cook, at Alden, became rabid and ran around a large area of country in the towns of Alden and Lancaster. He bit four men, several horses and cows, and a number of dogs before he was shot. The men were sent to the Pasteur Institute and all recovered, but several of the cows and horses died,

probably of rabies. In the towns of North Collins and Brandt an outbreak of rabies occurred about July sixteenth.

On September first, a rabid dog appeared in Clarence Center, about 7 A. M., and was not killed until 11 A. M. During this time of about four and one-half hours he traveled over eighteen miles and bit twenty-four dogs. On the same day another dog, near Akron, became rabid and traveled about sixteen miles before he was killed. During his trip he bit several dogs. Most of the dogs were killed at once, and the others were tied up by the owners; several of those tied up developed rabies afterward and were killed. The following week several other cases were reported in various places.

On October twelfth, the city of Buffalo passed an ordinance to muzzle all dogs, and the dog-catchers at once began to seize and kill all unmuzzled ones that could be found. Altogether, the situation began to improve about October thirtieth, and I have not heard of any new cases during the past three weeks.

Since August first there have been two deaths from rabies, and sixteen people have been sent to the Pasteur Institute, in New York city. There have also died from the same cause about twenty horses, cows and hogs, to say nothing of the dogs that have been bitten and killed afterward. This outbreak has clearly shown that the present agricultural laws are inadequate to cope energetically with it, and they should be amended by the coming Legislature, so that this Department can be in a better position to protect the public safety, should similar cases occur again.

On October nineteenth, I went from Buffalo to East Otto, Cattaraugus county, and examined a herd of cattle owned by Elmer E. Harrison of that place, who had reported to this Department that his stock was dying from some disease. I found none sick on my arrival, but two had died three days prior; from symptoms, given me by Mr. Harrison, I think they died from anthrax.

Very respectfully yours,

M. QUIGLEY,

Veterinary Agent.

Report of George G. Atwood.

Hon. Charles A. Wieting, *Commissioner of Agriculture:*

Dear Sir.— I have the honor to submit the following annual report of the work performed by me since November, 1898:

I have inspected 121 nurseries and recommended 117 certificates. I found traces of San José scale in 13 nurseries, and had about 2,000 trees destroyed. One certificate was withheld because the owner failed to clean out an infested orchard near his nursery. Two nurserymen were permitted to sell their trees after fumigating with hydrocyanic acid gas. One fails to clean up as he is directed.

I have been called on to inspect consignments of nursery stock from Ohio, New Jersey and Delaware, received without certificates, but I found them all clean.

I have reinspected parts of 20 nurseries and packing yards in November, and found trees infested with San José scale that were near trees dug out clean in the summer, thus showing the rapid spread of obscure scales; trees that were clean in June were infested in October.

It is a rare thing to find a nursery (or orchard) entirely free from pests. Traces, more or less numerous, are throughout my district, notably black-knot, pear and apple blights, crown gall of apple and pear. A great variety of aphides — the most serious are the woolly aphis on apple and other pyrus, psylla, the two case-bearers, caterpillars, canker-worms, oyster-shell and scurfy bar scales, grubs lecaniums, etc.

There are five armored scales, so closely allied to the San José scale that uninformed people mistake them for the more serious pest, but I have never found them destructive, either in the orchard or nursery.

ORCHARD WORK.

I spent about four weeks, in the spring of 1899, investigating an outbreak of apple tent caterpillars and canker worms, mostly in Ontario county. Very few owners were thorough in the work of destruction, none began early enough, and many neglected to do anything whatever; much damage was done to both the crop and the trees. Orchardists who wished and tried to keep their own trees clean were annoyed and damaged by their neighbors' neglect. A few were entirely successful.

I have induced owners to burn about 3,000 bearing trees that were infested with San José scale — 500 more should be burned, but the owners are slow to see that the trees are doomed, notwithstanding the fact that the fruit of pears and apples was marked, and the rapid spread of the scales to other trees imminent.

In many orchards, gardens and fruit plats in Ontario, Wayne and Cayuga counties, I have located San José scale, and much alarm is expressed by the orchardists.

In November, 1897, I began a series of experiments on trees infested with San José scale. On three trees I applied warm whale-oil soap, very thoroughly, two pounds to one gallon of water. In September, 1898, I found the young growth covered with scales, and young scales were thick on the trunks and large branches. About 80 per cent. of the old scales were killed, but enough lived to thoroughly infest the trees. I also used kerosene and water applied as a mechanical mixture on 24 infested trees, and in February, 1899, I repeated the spraying on one-half of them.

Twenty per cent. oil killed peach — one application.

Forty per cent. oil killed cherry — two applications.

Forty per cent. oil damaged plum — one application.

Forty per cent. oil damaged plum seriously — two applications.

Pure oil — one application did not kill apple or pear trees, but injured both branches and fruit buds.

Pure oil killed Kieffer pear, plum and currant bushes.

Sixty per cent. oil damaged large apple branches and killed the fruit buds, especially the lower branches, where they took the drippings in addition to the spray.

In all these experiments enough scales escaped alive to thoroughly infest the fruit of apples and pears and all the young growth, thus showing unsatisfactory results.

RECOMMENDATIONS FOR NURSERY STOCK.

It seems desirable that all nursery stock should be fumigated with hydrocyanic acid gas *before* shipment, to destroy all insect pests, especially San José scale, woolly aphis, bark lice, bud moths, case-bearers, etc.

Inspectors should locate the infestation, destroy badly marked trees, and see to the proper fumigation at shipping time, under approved rules.

RECOMMENDATIONS FOR ORCHARDISTS.

It should be a misdemeanor for any one to keep on his grounds any tree or shrub infested or infected with any "dangerously injurious" insect or fungus pests, after a notice of such fact by the Commissioner or his agents.

In addition to the above, my assistant, Mr. J. Jay Barden, has spent most of his time in Cayuga county tracing up the trees sold from Anderson's nurseries, at Union Springs, which were known to be badly infested with San José scales.

Number of orchards visited	159
Number of orchards infested	112
Number of trees destroyed	2,790

Respectfully submitted,

GEO. G. ATWOOD,

Inspector of Nurseries.

Report of C. H. Darrow.

Hon. Charles A. Wieting, *Commissioner of Agriculture:*

Dear Sir.— I have the honor to submit the following report of the work performed by me for six months, from June 1, 1899:

Number of nurseries inspected	47
Number of vineyards inspected	38
Total number	85
Number of acres in nurseries	847
Number of acres in vineyards	248
Total	1,095
Number of acres in nurseries inspected twice	50
Total acreage inspected	1,145

Nurseries in which San José scale was found:

Chautauqua county	1
Ontario county	9
Total	10
Nurseries in which scurfy scale was found in large numbers	1
Number of infested trees destroyed	3,500

I find the vineyards very free from disease.

In nearly every nursery I find more or less trees scattered through the blocks with black-knot on plums, wooly aphides on apples, scurfy on pears and currants, lecanium on plums, currants and some varieties of ornamental trees.

In some blocks of pears I find psylla quite abundant, which gives the trees a black, unhealthy appearance. There is also considerable pear blight in some sections.

The woolly aphides on apples is very abundant in many nurseries, and many thousands of trees have been rejected and destroyed by the growers this fall.

One nurseryman has sent some boys over his blocks of apples every week during the latter part of the season, and put a little kerosene on all the aphides they could find. This, at once, causes them to disappear and, as the result, this man has the cleanest blocks of apples to be found in this section.

I only found one nursery in which scurfy bark scales appeared in alarming quantities. This was upon a block of standard pears, and I had dug and destroyed about 300 trees before I would ask for a certificate.

I find the nurserymen very willing to destroy any trees infested with any of the above dangerously injurious insects or diseases, and many are willing, and have this fall fumigated any portion of stock to be shipped, where I have requested it.

ORCHARDS.

I have only spent a few days this fall thus far in the inspection of orchard trees and plants, but have found San José scale in every one visited (five), which shows that this dreaded disease has been widely scattered through the State. I did much orchard inspection last winter and spring under the direction of Mr. G. G. Atwood, and his report covers my work at that time. I have noticed the results of his experiments, and hence only add one to his list.

One orchard contained several trees, pears and plums quite badly infested with scurfy bark scale. The parties owning this orchard washed these trees thoroughly (using a brush) with a solution of whale-oil soap, three pounds to one gallon of water. This was applied before the leaves started last spring, and now not a scale is to be found on those trees, and the bark is brighter and more healthy than those around them which were not treated.

RECOMMENDATIONS.

Some nurseries, inspected in June and July, were apparently free from San José scale. I went over these same blocks again in October and November, and in one block destroyed about 200 trees, and in another about 250. This was due to the rapid spread of this scale during the latter part of the season, also the scales can be much more easily discovered when the trees are free from leaves. Hence, I would recommend two inspections yearly, so far as possible, and especially in localities where scale is known to have existed.

I also think it would be advisable to compel all nurserymen to fumigate their stock or seedlings before being planted, and also all trees or plants put upon the market, using hydrocyanic acid gas, at least one ounce cyanide potassium, one ounce sulphuric acid, one and one-half ounces water, for every 100 cubic feet of space enclosed.

I would further recommend that the law be so changed as to compel orchardists, farmers and others owning land, upon which trees or plants are being grown, to destroy any trees or plants infested with dangerously injurious insects or diseases; also be compelled to destroy the canker worm, army worm, caterpillar, etc., which appear in the spring and do such an amount of damage both to the foliage and to the crop of fruit.

I feel that our State experiment station should be urged to make some systematic experiments in treating infested trees and

plants, in order to ascertain what may be used, and the quantity used, to destroy the various scale insects without injury to the tree. Parties frequently ask me in regard to this point, and thus far there is nothing reliable to give them.

Respectfully submitted,

C. H. DARROW,

Inspector of Nurseries.

Report of Percy L. Huested.

Hon. C. A. Wieting, *Commissioner of Agriculture:*

Dear Sir.— I have the honor to submit the following report of work done between June 1 and November 30, 1899, under the provisions of chapter 482 of the Laws of 1898:

The district assigned to me for nursery inspection comprised all of eastern New York, east of the counties of Franklin, Essex, Warren, Saratoga, Schenectady, Schoharie and Delaware; and north of Orange and Putnam, inclusive. New York county was also included and later Chenango, Otsego and Montgomery were added, making a total of twenty-one.

After two weeks with Mr. Chester Young, in the work on Long Island, I began work in the above district, June fourteenth.

Mr. F. M. Greene assisted throughout the season and did careful work.

In all, fifty-five nurseries were examined, of which forty-four were entirely free of the San José scale. In ten of the remaining cases the infested stock was burned, after which certificates were granted. In the other case the entire stock of five thousand was burned, and, of course, no certficate was issued.

Two of the infestations were of but a single tree each, and in one case none of the scales could be found old enough to make identification certain, although an examination of a sample from the tree was made by Professor Lowe, entomologist of the New York Experiment Station.

Five of the infestations were at places inspected last year, six were at new places examined this year for the first. Nine thousand four hundred and seventy-five trees were burned in the work of nursery inspection.

The number of nursery trees burned ranged as follows: 5,000, 2,224, 859, 526, 674, 114, 40, 35, 2, 1, 1.

The lot of 5,000 were peach trees left in nursery trenches until practically unsalable, and none had been sent out last season. Although the scale had spread throughout the lot, none could be found on any of the orchard trees in the vicinity.

The lot of 2,224 were trees purchased in the spring of 1899, and were, no doubt, clear when set out in a small nursery containing a few rows of infested stock. There were some large infested apple and pear trees near, and these, with the infested stock, sufficed to introduce the scale throughout the new stock. As the stock sold at this nursery, last spring, was nearly all purchased stock, it is not believed that the scale was spread to other places, but had no inspection been made there would, no doubt, have been a wide distribution this fall and next spring.

The infestation of 859 trees was likewise caused by the planting of new stock among a few slightly infested trees, which the nurseryman supposed to be free, although he knew that scale had been in the block previously.

The infestation of 674 was plainly caused by the planting of eight lindens, which were infested close to a block of apple. As in the preceding cases the scaly stock would have, no doubt, been sent out without its condition being known, for, though the lindens were so thickly incrusted as to be already dying back, the apples would not seem at all infested, except when examined more closely than a nurseryman or buyer would do. The lindens are thought to have come from without the State, but the record which would make this fact certain has been lost. Except the surplus trees set in the nursery, all of them went to the place of a private party who was glad to burn the infested trees, twenty-nine in number, when their condition was brought to his notice.

In the remaining smaller infestation pains have also been taken to learn if any stock likely to have been infested was sent out last spring, and in one case only does it seem probable that any infested stock was sent out.

A close reinspection of the suspicious nurseries was made, with the result that the scale was again found in four cases. In one of these, but a single tree was infested, and in another, but six. The two remaining places, however, brought the total number destroyed, on reinspection, up to three hundred and twenty. These trees are included in the numbers given previously as destroyed. A reinspection is most especially needful in those infestations cleaned up early in the season, for a few trees overlooked at that time can undo much of the gain made in some cases. It is also more essential in those cases in which the nurseryman is inclined to remove only the infested stock and no more. This is all that can be required under the law, but most nurserymen are willing to sacrifice some additional stock, in order to make sure of eradicating the scale.

The work of inspection, together with calls at thirty-eight (38) places at which it was thought nursery stock might be grown, and the inspection of three orchard infestations, occupied all the time up to October twentieth, 107 working days. The remaining time to November thirtieth, 34 working days, was devoted to following up shipments which came into the State from a nursery believed to be knowingly sending out infested stock, to watching the sales in New York auction rooms, and to examinations of suspected private places, and destroying infested trees.

The amount of nursery stock shipped in the fall is but 10 to 20 per cent. as great as the amount shipped during an equal period in the spring, and but few shipments came in from the infested nursery. Including those at the auction-rooms, seventeen shipments were inspected. Two infested lots consigned to the auction-rooms were destroyed, eighty-four trees in all. One private place was found at which trees purchased of the nursery above referred to in the spring of 1899 were badly infested.

Twenty-nine private places, mostly near blocks of nursery stock which showed scale at the reinspection, and which places were suspected of being infested, were examined. The result was that infested trees were found at thirteen places. At twelve of

these the infested trees were burned, one hundred and forty-seven in all. At the remaining place sixty-eight infested trees were found among an orchard of about 1,100 apple trees set two years ago, and the owner will remove them. On account of the greater distance between the trees the spread of San José scale is much slower in an orchard than in a nursery, where the trees are in close rows.

Four infested orchards inspected during the summer are being treated by their owners with whale-oil soap and diluted kerosene. The results of treatment have not been as satisfactory as earlier experiments seemed to promise. Repeated treatments soon make the cost heavy, and although the numbers of scales may be so reduced as to weaken the tree comparatively little, yet the young scales show a great preference for the fruit as a place to locate, and the appearance is more or less damaged thereby, according to the numbers of scales. Fruit infested with San José scale from California has been the means of closing the ports of Germany to all American fruit, and growers of apples for the export trade have suffered in some measure. The cost of destroying infested trees has been borne by the nurserymen, in all instances. On some private places labor was engaged at an expense to the State of $8.50, in all.

Respectfully submitted,

PERCY L. HUESTED,

Inspector of Nurseries.

Report of H. C. Peck.

Hon. Charles A. Wieting, *Commissioner of Agriculture:*

Dear Sir.—I have the honor to make the following report of the work performed by me, in the service of the Department of Agriculture of the State of New York, under the provisions of chapter 338 of the Laws of 1893, as amended by chapter 482 of the Laws of 1898, for the year ending December 31, 1899:

The work carried on by me during the winter of 1898 and 1899 consisted of locating the growers of berry plants, and inspecting the plats from which sets were to be sold the following spring, examining orchards which had been planted within the last four or five years, and inspecting the blocks of nursery stock which were most liable to be infested.

This work continued, without finding any infested stock, until March twenty-seventh, when I discovered San José scale in the nursery belonging to Jacob Wentz, situated two and one-half miles north of Brighton village, in the Town of Brighton, Monroe county. As near as I could ascertain the pest had been brought into the nursery on currant bushes imported from New Jersey. I found the scale had spread through most of the stock, consisting of pear, plum, apple and ornamental trees. The weather being very cold and the ground frozen hard, I did not attempt to destroy the infested stock until later in the season.

During my nursery inspection of the previous summer, I had found the stock grown by H. S. Knapp, of Penfield, to be infested by a number of more or less injurious insect pests. It was decided that by fumigating this stock with hydrocyanic acid gas it would be in a fit condition to go on the market. As soon as the weather

had moderated sufficiently to allow Mr. Knapp to commence digging he wrote to me in regard to the subject. A fumigating receptacle was built and all his stock was submitted to the action of the gas.

Continuing my nursery and orchard inspection for a few days until the nurserymen had finished their busy season, then I employed three laborers and dug out and burned all infested stock in the Jacob Wentz nursery, finishing on the twenty-seventh of April, at a cost, including livery hire, rent of tools, car-fare, labor and compensation of $92.07.

About the first of May I inspected a shipment of Japanese maples imported by Mr. Stecker, which were said to be infested with *poliaspis pini*. A few of these scales were found on some of the plants. Obtaining Mr. Stecker's consent, I had the infested plants treated with a solution of whale-oil soap.

Spring being well advanced, the effect of the canker worm was very marked in some of the orchards in Monroe county. Badly infested orchards were stripped of their foliage, and appeared as though they had been burned. I drove through a portion of the county and talked with the farmers in regard to spraying, but with little success, for most of them were too busy to give it any attention. Soon after this I started trimming out black knot. Trees which were located in the vicinity of plum orchards were thoroughly trimmed. All limbs showing signs of the fungus disease were cut and burned. Only a comparatively few trees could be treated, for there are thousands on the roadsides and in yards that are badly diseased. I could only give those my attention where requested to do so by some fruit grower.

Commencing on June fifth inspecting nursery stock for certificates, I continued in this work throughout the season, finding very little infested stock, except where blocks of trees were found to be diseased with pear blight. Such blocks were gone over very carefully, cutting out parts or whole trees, where necessary. The season being very favorable for the development of this disease,

it was necessary to cut out from 20 to 40 per cent. of the trees in some blocks which had been diseased but a short time.

In the nursery of Brown Bros. Co., I located a few Japanese maples infested with *parlatoria viridis*. This scale being a new species, it was deemed wise to prevent its spread, if possible. Mr. Brown objected to destroying the trees, for the reason that part of them had been sold and could not be replaced. Fumigation was resorted to with success. I constructed a tent to use in the nursery-row, and by working nights to prevent the action of the sun and gas from injuring the foliage, we had no trouble whatever. Specimens submitted to Dr. Felt, State Entomologist, failed to show any signs of life, and an examination made in the fall was just as satisfactory. No living scales were found, and most of the old scales had been removed by the elements.

The latter part of June I received a letter from the Department, informing me that San José scale had been found on the I. H. Babcock farm, at Lockport. An investigation brought out the facts that Mr. Babcock had purchased infested trees from a New Jersey firm several years previous, and that the orchards on his place were badly infested. One hundred and ten bearing trees were taken out and burned. Mr. Babcock refused to let me go on destroying the infected trees. I called on him several times in regard to the matter, showing him reports of work carried on in the south, where orchardists were attempting to control the pest by using insecticides, and tried to convince him that the only way to protect his own and neighbors' interests was to root up and burn all infested trees, still he refused. I treated one young orchard with kerosene emulsion, but was wholly unsuccessful, for an examination showed the trees to be in a worse state of infestation than they were at the time the application was made.

August sixteenth, I inspected the nursery belonging to L. W. Hall, of Rochester, and found a block of pear trees badly infested with *aspidiotus ostræœformis* and a block of mountain ash infested with Putnam scale (*aspidiotus ancylus*); both of these blocks were dug out and burned.

August thirtieth, I discovered San José scale in the nursery of Henry Lutts & Son at Youngstown, Niagara county. All infested stock was destroyed.

No other stock was found to be infested with San José scale or other insect pests of such nature as to warrant its destruction, although many blocks were found to be more or less infested with wooly aphis (*schizoneura lanigera*), or pear tree psylla (*psylla pyricola*). In all such cases I informed the proprietor of the condition of his stock and recommended that it be thoroughly fumigated before shipping.

I have inspected and reported for certificates 156 nurseries, comprising about 2,000 acres of stock.

During the fall packing season I inspected a large amount of imported stock on the packing yards, in the vicinity of Rochester, but was unable to inspect all stock shipped in from other States. Most of this stock was repacked and shipped out under New York State certificates.

Since the packing season closed I have inspected stock imported from other States by the nurserymen for spring shipments.

November twenty-first, I inspected a plat of berry plants for Geo. M. Keller, situated three miles north of Brighton, and found them infested with the rose scale (*autocaspis rosæ*), and on the twenty-seventh I examined the remaining nursery stock and fruit trees on the Jacob Wentz place. A few bearing fruit trees were found to be slightly infested with San José scale; both the infested plants and trees will be taken out and burned as soon as possible.

Respectfully submitted,

H. C. PECK,

Inspector of Nurseries.

Report of Chester Young.

Hon. Chas. A. Wieting, *Commissioner of Agriculture:*

Dear Sir.— I have the honor to submit to you the attached report for the work done in my district for the year, from December 15, 1898, to date:

The work done in this division of the State during the past year, under the provisions of chapter 482 of the Laws of 1898, may be easily divided into five heads. These heads, with the approximate amount of work done under each of them, are as follows:

	Days.
Nursery inspection	116
Importation inspections	48
Orchards and private places	12
Experimental work	5
Fumigating work	9
Total	190

The time elapsed since the last report, on December 15, 1898, is 304 days. This you will easily see exceeds the number of days' work accounted for in the above table.

During the winter, however, there was much time for which, owing to the lack of work, I received no pay. This time, together with the other items in the following summary, will fully account for all the time elapsed since the date mentioned.

	Days
Work above specified	190
Laid off without pay	46
Sundays and holidays	49

	Days.
Vacation	5
Time for report	10
Work at office	4
Total	304

During the time, since the first days of May, I have had constantly with me, as a helper, Mr. T. F. Niles of Spencertown, N. Y. It has been the duty of Mr. Niles to look after the details of the work, such as the removing of infested stock, superintending men at work for us, and aiding and superintending the construction of the fumigating houses. In this way he has saved much of my time, and added greatly to the expediting of the work. In every way he has proved very prompt and highly satisfactory.

By the appointment of Mr. Huested, on June first, my district of last year was divided, leaving me only the counties of Westchester, Rockland, Kings, Queens, Nassau, Richmond and Suffolk. This was a needed change as, last year, even with the aid of a second helper (Mr. Barden), and that of an inspector and helper from another district, I was unable to cover the ground assigned to me before October first. The district now assigned to me, while small, still furnishes ample work. It is the most badly infested district in the State, and also has the large number of fifty-eight nurseries within its borders. Beside these, there are the port of New York, into which importations of stock are constantly coming, and the auction-rooms in the city, which need to be constantly watched to prevent the sale of diseased stock.

In the nursery inspection, this year, we have been much more severe and painstaking than last year. This is due partly to the greater length of time given us to do our work in, and partly owing to the fact that last year the law was new and it was impossible to enforce as closely as we could this year.

The total number of nursery inspections made by me this year is sixty-eight. Of these, five made in the spring were of places

in the counties later assigned to Mr. Huested, and were nurseries not known by me during the inspecting season last year. In these cases the inspections were made early, and the certificates issued were only good until the following June. Besides these, five were inspections made in my present district for the same purpose. This leaves the number of regular inspections in this district as fifty-eight. It was also planned to give the worse infested places a second inspection, but owing to the early fall this was not done, as we were able to begin fumigating much earlier than we had supposed.

There have been some changes in the number of nurseries this year. The past year has seen four nurseries abandoned and eleven new ones added to the list. Of the whole number of the nurseries, thirty, or 51.7 per cent., have been found infested. Last year, the percentage of infested places in the same district was 63, so a decided improvement has been shown. Of the thirty places found infested this year, twenty-two are places found infested last year, four are new places not visited last year, and four are places last year found free. Five places infested last season this season have been found free from any trace. Many places too badly infested last year have now been found almost free. An instance, like that of Milne Bros., of Islip, will illustrate. Last year, this place had treated or destroyed about 600 trees, while in contrast, this year, we found but twenty trees there as infested. Then, too, on the other hand, some cases exist where no improvement has been shown, and some where the things are worse this year than last.

Many of the nurseries in this district are small, in fact, only two very large ones exist, and one of these has but seventy-five acres. The total acreage of all the nurseries in this district is 530, which makes the average nursery only nine and fourteen-hundredths acres in extent. Last year, in this district, there were about 46,000 trees destroyed for disease or infection. This year, the total number amounts only to 22,885, and if we strike out the exceedingly large number from one place alone, we have left only five thousand two

hundred and twelve as destroyed in all the remaining places, or an average of 174 trees to a place.

The total amount of labor required to inspect the nurseries and destroy the infested stock is as follows:

	Days.
Inspector (Chester Young)	116
Helper (T. F. Niles)	110
Laborers furnished by nurserymen	25
Laborers furnished by the state	26
Total	277

In connection with this year's work attention is called to the remarkable absence of livery bills during the good weather of the summer. Both myself and Mr. Niles have made it a point to carry bicycles with us and to use them in traveling between the railroad stations and the nurseries, some of which lie at long distances from the nearest station.

At this time of the year it is early to give a full report on the fumigating work, but such as has been done is as follows:

Last spring considerable time was spent fumigating at the nursery of Chas. Zeller's Sons, at Flatbush. In all, about 500 trees were treated. This fall, so far, preparations have been made to fumigate at the following places: Parsons & Sons Co., at Flushing; Blacker & Hall, at Brentwood; Isaac Johnson, at Hewlett's, and at Rowehl & Granz, at Hicksville. To date, work has only been completed at the nursery at Brentwood, and is now in progress at the one at Hewlett's. In all respects this treatment has proved highly satisfactory, the only objection being that it takes too much time, and is too expensive for the State. I would recommend that, next year, this practice in nurseries be abandoned, and that destruction of all infested stock be resorted to. Owing to business matters of a private nature I have been unable personally to oversee the work of fumigating this fall, but, under my direction, Mr. Niles has done highly satisfactory work.

During the winter the importations of nursery stock from Japan kept me busy inspecting for about one-half of the time. In all, a total of more than 150 cases were handled here the past winter. In most of the cases the stock was remarkably free from infection, but in the case of two lots there was a great deal of injurious scale insect on the Japan maples. One of these lots were seized and turned over to Mr. Felt, State Entomologist, for experimental work, and the other was fumigated thoroughly at the owner's place, at Rye.

The work in orchards and private places was very brief this spring, about two weeks only being spent by me in examining the orchards, etc., in the fruit belt along the Hudson in Ulster county. In this inspection I found two small batches of scale, and took the best means known to me to exterminate it, without destroying the trees. The full success of the work I cannot report on, as I have not yet revisited the places to ascertain how things are at present.

On June tenth, Mr. Wieting called me to Cobleskill to help fight the tent caterpillars that were doing such extensive damage in that section. When I arrived I found but very few of the worms feeding, but conducted experiments with poisons in the following proportions:

Paris green	1½ ounces.
Lime	8 "
Water	50 gallons.

London purple	3 ounces.
Lime	12 "
Water	50 gallons.

White arsenic	1 pound.
Sal soda	2 "
Water	3 quarts.

Boil this for fifteen minutes and then take for spraying as follows:

Water	50 gallons.
Arsenic solution	1 quart.
Lime	3 pounds.

In place of the lime also was used sugar of lead in the following proportions:

Water	50 gallons.
Sugar of lead	12 ounces.
Lime	6 "
Arsenic solution	1 quart.

In case of all these poisons except that of the London purple, whenever the caterpillars could be induced to eat it they were killed, even though they had reached an adult condition. The best results were obtained from the use of the arsenites of lime and lead. Probably the lead will give the best results, but as it is an accumulative poison the use of the lime arsenite is more strongly recommended. There is no doubt but that the use of these poisons when the caterpillars are feeding regularly will greatly check the work of destruction. It is to be recommended, however, that the spraying be begun early while the caterpillars are still small and then less doses of the insecticides will do the work of larger doses applied at a later period.

Experiments were also made with a Deming kerosene pump in the following proportions of kerosene: 50%, 25%, 20%, 15%, 10% and 5%, with the following results:

In the case of 50% oil all the caterpillars touched were killed and did not recover in the least.

In the case of the 25% oil, twenty-five caterpillars were in the bunch sprayed and the following results were obtained: Killed, 17; escaped injury, 6; badly injured, 2. One of these as recorded as badly injured died later.

In the case of 20% of oil, the bunch numbered eleven, and the results were as follows: Killed, 8; badly injured, 2; escaped, 1.

In the case of the 15% oil, the bunch sprayed was twenty-six in number, and the results were as follows:- Killed, 14; escaped, 12, many of which were badly injured.

In these trials the length of time allowed for the oil to act was three minutes. The above trials were repeated in numerous cases with the results running in about the same percentages of killed and badly injured caterpillars. Lower percentages of oil were also used, but the results were so unsatisfactory that no records of them were kept.

These oil experiments were conducted on the caterpillars on the fences, etc., where they were crawling about in search of a place to pupate and on the bunches which had collected on the trunks of trees. In the cases where the trunks of trees are sprayed it was found dangerous to use more than a 20% solution of the oil, as a larger proportion would seriously affect the trees.

Many of the caterpillars which are recorded as escaping were collected and caged, and it was found later that they could not survive to pupate, but died without transforming. The use of the oil will be found highly beneficial to use after the caterpillars have reached the pupating stage, to prevent the maturing of the moth and a consequent large crop for the succeeding year.

This winter and next spring it is the intention to experiment with oil on the egg masses and also with poison on the young caterpillars to find means of better controlling them than this report can recommend.

Very truly yours,

CHESTER YOUNG,

Nursery Inspector.

FINANCIAL REPORTS

OF THE

State Agricultural Society, County, Town and Other Agricultural Societies in the State of New York, for the Year 1899.

NEW YORK STATE AGRICULTURAL SOCIETY.

RECEIPTS.

Balance on hand at close of fiscal year 1898.....		$3,051 08
From gate receipts, grand stand, stall rent	$17,092 75	
From rent of grounds	120 00	
From rent of privileges	2,678 00	
From annual members	852 00	
From life members	150 00	
From sundries	3,013 52	
From notes given	22,036 51	
From State	52,113 67	
Receipts for 1899		98,056 45
Total receipts		$101,107 53

DISBURSEMENTS.

For payment of notes	$37,306 36	
For permanent improvements	4,500 10	
For interest	4,575 74	
For labor	1,317 56	
For salaries: Secretary, $1,500; treasurer and general manager, $1,500; office assistants, $445; police, $1,088.50; superintendent, $480; total	5,043 50	
For premiums on horses..	$4,127 00	
For premiums on cattle ..	4,455 00	
For premiums on sheep ..	1,995 00	
For premiums on swine ..	1,748 00	
For premiums on poultry,	1,756 50	

For premiums on farm produce	$939 00	
For premiums on dairy products	987 50	
For premiums on domestic,	453 90	
For premiums on flowers.	1,742 00	
For premiums on fruits..	1,905 50	
For premiums on miscellaneous, art, oil and water-color paintings ..	500 00	
Total premiums	$20,609 40	
Sundries during fair and year	26,577 90	
Total disbursements		$99,900 56
Balance (credit)		$1,206 97

Timothy L. Woodruff ..... President.
W. Judson Smith ..... Treasurer.

CAMBRIDGE VALLEY AGRICULTURAL SOCIETY AND STOCK BREEDERS' ASSOCIATION.

RECEIPTS.

Balance on hand at close of fiscal year 1898		$44 44
From gate receipts	$4,890 55	
From rent of privileges	2,892 33	
From entries for premiums	1,128 05	
From annual members, hay, grain, barn rent, etc.	150 61	
From grand stand	1,779 17	

From entries for races (horse)	$1,165 00	
From State	2,000 00	
Receipts for 1899		$14,005 71
Total receipts		$14,050 15

DISBURSEMENTS.

For payment of bonds, notes or other obligations	$948 00	
For printing and advertising	1,935 57	
For attractions	623 80	
For labor	623 87	
For hay, straw and grain	225 83	
For miscellaneous	974 89	
For salaries: Secretary, $395; treasurer, $125; office assistants, $13.50; police, $131; judges, $201.83; superintendent, $142.50; total	1,132 83	
For race purses (horses)	2,850 00	
For premiums on horses	$452 00	
For premiums on cattle	1,000 00	
For premiums on sheep	561 50	
For premiums on swine	268 00	
For premiums on poultry,	1,164 00	
For premiums on farm produce	204 00	
For premiums on dairy products	15 00	
For premiums on domestic,	573 11	
For premiums on fruits	60 25	
For premiums on miscellaneous	421 50	
Total premiums		4,719 36

Total disbursements	$14,034 15
Balance (credit)	$16 00

Jerome B. Rice ..... President.
Henry A. Qua ..... Treasurer.

ALBANY COUNTY AGRICULTURAL SOCIETY AND EXPOSITION.

RECEIPTS.

Balance on hand at close of fiscal year 1898		$0 88
From gate receipts	$3,362 25	
From grand stand	302 00	
From rent of privileges	851 42	
From entries for premiums	139 00	
From annual members	126 70	
From entries for races (horse)	840 00	
From note given, due December 1, 1900	500 00	
From State	2,114 13	
Receipts for 1899		8,235 50
Total receipts		$8,236 38

DISBURSEMENTS.

For payment of bonds, notes or other obligations	$154 54
For permanent improvements, poultry-house and horse sheds	2,186 41
For labor and material	186 34

For dues National Trotting Association, $18.25; taxes and insurance, $71.33; advertising, $223.15; attractions, $300; band, $122.50....		$735 23	
For miscellaneous expenses		354 60	
For salaries: Secretary, $125; office assistants, $50; police, $21; judges, $107.93; superintendent, $41.20; helpers, etc., $177.50; total		522 72	
For race purses (horses).....		1,800 00	
For premiums on horses ..	$226 00		
For premiums on cattle ...	445 50		
For premiums on sheep ...	328 00		
For premiums on swine	169 00		
For premiums on poultry..	247 25		
For premiums on farm produce	86 75		
For premiums on dairy products	16 00		
For premiums on domestic..	413 50		
For premiums on implements and machines	5 00		
For premiums on fruits . ..	118 00		
For premiums on miscellaneous	99 00		
Total premiums		2,154 00	
Total disbursements			$8,093 84
Balance (credit)			$142 54

Robert J. McCauley ..... President.
Edward Becker . ..... Treasurer.

ALLEGANY COUNTY AGRICULTURAL SOCIETY.

RECEIPTS.

Balance on hand at close of fiscal year 1898.....		$101 80
From gate receipts	$673 77	
From sale of hay	2 75	
From rent of privileges	111 00	
From entries for premiums, Class 12,	33 00	
From annual members	70 00	
From entries for races (horse).....	161 50	
From bonds issued, notes given or any other obligation	185 23	
From State	1,340 85	
Receipts for 1899		2,578 10
Total receipts		$2,679 90

DISBURSEMENTS.

For payment of bonds, notes or other obligations	$200 00
For permanent improvements	148 32
For labor	93 99
For material, supplies, printing and advertising	130 87
For band, $45; special attractions, $70	115 00
For paid dues, State Association, stamp tax, water rates, stamps, postage and miscellaneous expenses....	81 57
For salaries: Secretary $50; treasurer, $25; office assistants, $11.25; police, $24.50; judges, $46.50; superintendent, $5; helpers, etc., $19.50; Total	181 75

For race purses (horses)		$422 00	
For premiums on horses ...	$124 00		
For premiums on cattle ...	174 00		
For premiums on sheep ..	114 50		
For premiums on swine	59 50		
For premiums on poultry..	57 80		
For premiums on farm produce	31 75		
For premiums on dairy products	1 50		
For premiums on domestic..	69 60		
For premiums on implements and machines	3 00		
For premiums on flowers.. ,	9 10		
For premiums on fruits ...	2 00		
For premiums on miscellaneous	13 40		
Total premiums		660 15	
Total disbursements			$2,033 65
Balance (credit)			$646 25

E. S. Bartlett. . . .. President.
F. H. Jackson . . .. Treasurer.

BROOME.

RECEIPTS.

Balance on hand at close of fiscal year 1898			$289 46
From gate receipts		$2,339 45	
From rent of privileges		489 00	
From entries for premiums		30 00	

From stock sold	$62 25	
From entries for races (horse)	412 00	
From lumber, hay, etc.	32 10	
From State	1,678 01	
Receipts for 1899		$5,042 81
Total receipts		$5,332 27

DISBURSEMENTS.

For payment of bonds, notes or other obligations (interest)	$234 00	
For hay, straw and feed	114 99	
For permanent improvements	1,120 94	
For dues to State and National Trotting Association and present to Treasurer	40 78	
For labor	138 99	
For material	125 00	
For printing and advertising	285 77	
For rent of grounds 1898 and 1899	400 00	
For attractions	170 00	
For salaries: Secretary, $150; treasurer, $100; police, $83.50; judges, $61.50; superintendent, $168; total,	563 00	
For race purses (horses)	900 00	
For premiums on horses	$162 00	
For premiums on cattle	340 50	
For premiums on sheep	58 75	
For premiums on swine	12 00	
For premiums on poultry	122 75	
For premiums on farm produce	38 75	
For premiums on dairy products	8 75	

For premiums on domestic..	$123 25		
For premiums on implements and machines	26 00		
For premiums on flowers....	21 25		
For premiums on fruits	33 00		
For premiums on miscellaneous	184 00		
Total premiums		$1,131 00	
Total disbursements			$5,224 47
Balance (credit)			$107 80

Parley M. Brown ..... President.
P. H. Landers ..... Treasurer.

CATTARAUGUS.

RECEIPTS.

Balance on hand at close of fiscal year 1898.....		$551 81
From gate receipts	$2,317 65	
From rent of grounds	4 00	
From rent of privileges	590 05	
From entries for premiums	908 00	
From annual members	12 00	
From entries for races (horse)	231 75	
From lumber sold	20	
From bonds issued, notes given or any other obligation	1,606 74	
Receipts for 1899		5,673 39
Total receipts		$6,222 20

DISBURSEMENTS.

For payment of bonds, notes or other obligations		$236 00
For permanent improvements		720 00
For labor		513 00
For material		413 67
For band		140 40
For Zeb, bicycle rider		78 00
For Ed Mynten, rope walker		40 00
For salaries: Secretary, $50; treasurer, $30; office assistants, $38.80; police, $106.50; superintendent, $60.70; helpers, etc., $13; total		299 50
For race purses (horses)		1,116 25
For ball game		82 50
For premiums on horses	$148 55	
For premiums on cattle	264 45	
For premiums on sheep	74 00	
For premiums on swine	40 75	
For premiums on poultry	131 80	
For premiums on farm produce	53 30	
For premiums on dairy products	11 00	
For premiums on domestic	233 40	
For premiums on implements and machines	3 05	
For premiums on flowers	6 50	
For premiums on fruits	16 20	
For premiums on miscellaneous	5 75	
Total premiums		988 75

For taxes, $23.06; insurance; $26.25; dues, $49.06; total	$98 37	
Total disbursements		$4,726 44
Balance (credit)		$1,495 76

C. R. Rhoades ..... President.
E. L. Campbell ..... Treasurer.

CHEMUNG.

RECEIPTS.

Balance on hand at close of fiscal year 1898		$71 93
From gate receipts	$1,864 24	
From rent of grand stand	210 25	
From rent of privileges	309 00	
From entries for premiums	47 56	
From annual members	291 00	
From entries for races (horse)	38 50	
From donations (miscellaneous)	57 89	
From State	1,787 85	
Receipts for 1899		4,606 29
Total receipts		$4,678 22

DISBURSEMENTS.

For payment of bonds, notes or other obligations	$200 00
For interest	72 20
For labor	391 07
For material	166 10

For advertising, $413.12; attraction, $379.25; total		$793 17	
For telegraph, telephone and express, postage		79 50	
For miscellaneous		281 02	
For salaries: Secretary, $100; office assistants, $85; police, $127.75; judges, $23.20; helpers, etc., $45.35; total		381 30	
For race purses (horses)		417 75	
For premiums on horses	$186 00		
For premiums on cattle	73 00		
For premiums on sheep	91 00		
For premiums on swine	122 00		
For premiums on poultry	330 75		
For premiums on farm produce	106 25		
For premiums on dairy products	16 00		
For premiums on domestic	244 00		
For premiums on flowers	139 25		
For premiums on fruits	43 50		
Total premiums		1,351 75	
Total disbursements			$4,133 86
Balance (credit)			$544 36

Frank J. Cassada ..... President.
Edwin J. Young ..... Treasurer.

CHENANGO.

RECEIPTS.

From gate receipts, including exhibition tickets	$2,245 90	
From rent of track	75 25	
From rent of privileges	240 00	
From grand stand	407 40	
From fair-book	192 50	
From hay	50 00	
From entries for races (horse)	150 00	
From all other sources	43 45	
From donations	39 00	
From bonds issued, notes given or any other obligation	147 50	
From State	1,601 10	
Receipts for 1899		$5,192 10
Total receipts		$5,192 10

DISBURSEMENTS.

Balance due at close of fiscal year 1898.	$5 35
For payment of bonds, notes or other obligations	1,952 94
For gate-tender	35 00
For permanent improvements	47 17
For livery, $62.05; tent, $75; circuit expenses, $33.75; total	170 80
For labor	155 50
For material	41 14
For feed, $20; insurance, $67.36; total.	87 36
For printing and advertising	292 50
For other bills, dues, taxes, etc	122 15

For salaries: Office assistants, $76.20; police, $30; judges, $38.50; helpers, etc., $55; total		$199 70	
For race purses		686 99	
For attractions, $380; band, $100; total		480 00	
For premiums on horses	$115 50		
For premiums on cattle	174 28		
For premiums on sheep	47 00		
For premiums on swine	14 00		
For premiums on poultry	131 46		
For premiums on farm produce	54 05		
For premiums on dairy products	24 00		
For premiums on domestic	68 10		
For premiums on implements and machines	30 50		
For premiums on flowers	6 05		
For premiums on fruits	27 10		
For premiums on miscellaneous	137 81		
Total premiums		829 85	
For percentage as racing fund (our share)		19 83	
Total disbursements			$5,126 28
Balance (credit)			$65 82

Silas W. Berry ..... President.
Geo. S. Munson ..... Treasurer.

CLINTON.

RECEIPTS.

Balance on hand at close of fiscal year 1898		$2,930 77
From gate receipts	$3,460 60	
From rent of privileges	1,279 03	
From entries for premiums	332 00	
From annual members	89 00	
From life members	56 35	
From entries for races (horse)	957 27	
For bonds issued, notes given or any other obligation	1,110 00	
From State	2,480 68	
Receipts for 1899		$9,764 93
Total receipts		$12,695 70

DISBURSEMENTS.

For permanent improvements	$1,372 46	
For dividends, January 20, 1899	1,133 40	
For labor	466 28	
For material	2,125 98	
For salaries: Secretary, $300; treasurer, $150; office assistants, $88.75; police, $210.50; judges, $228.27; superintendent, $100; total	1,077 52	
For race purses (horses)	800 00	
For premiums on horses	$253 00	
For premiums on cattle	887 00	
For premiums on sheep	367 00	
For premiums on swine	112 00	
For premiums on poultry	55 25	
For premiums on farm produce	64 50	

For premiums on domestic..	$126 00	
For premiums on implements and machines	57 00	
For premiums on flowers ...	70 75	
For premiums on fruits....	26 00	
For premiums on miscellaneous	440 75	
Total premiums		$2,459 25
Total disbursements		$9,434 89
Balance (credit)		$3,260 81

D. F. Dobie ..... President.
M. F. Parkhurst ..... Treasurer.

COLUMBIA.

RECEIPTS.

Balance on hand at close of fiscal year 1898		$187 96
From gate receipts	$4,495 75	
From rent of privileges	1,321 91	
From entries for premiums	303 75	
From annual members	230 00	
From advertisements in premium list..	340 50	
From entries for races (horse)	1,125 00	
From donations	6 25	
From amount refunded by railroad company	100 00	
From State	2,528 43	
Receipts for 1899		10,451 59
Total receipts		$10,639 55

DISBURSEMENTS.

For payment of bonds, notes or other obligations (interest)		$282 50
For printing and advertising		989 88
For permanent improvements		295 07
For dues National and State Association,		36 50
For labor, $276.78; care of stock, $139.48; expenses, $150.32; total		586 58
For material		343 55
For floral parade		174 91
For bands		236 92
For attractions		370 00
For salaries: Secretary, $100; treasurer, $50; office assistants, $161; police, $83; judges, $139.13; superintendent, $10; helpers, etc., $133.50; total		676 63
For race purses (horses)		2,225 00
For insurance		13 50
For guarantee paid to railroad		100 00
For premiums on horses	$394 00	
For premiums on cattle	544 00	
For premiums on sheep	327 00	
For premiums on swine	175 00	
For premiums on poultry	387 00	
For premiums on farm produce	121 50	
For premiums on dairy products	23 50	
For premiums on domestic	198 75	
For premiums on implements and machines	36 00	
For premiums on flowers	117 75	
For premiums on fruits	74 75	

For premiums on miscellaneous	$880 10	
Total premiums	$3,279 35	
Total disbursements		$9,610 39
Balance (credit)		$1,029 16

George McClellan . . . . . President.
H. J. Baringer . . . . . Treasurer.

CORTLAND.

RECEIPTS.

Balance on hand at close of fiscal year 1898		$54 57
From gate receipts, $2,961.55; grand stand, $469.75; total	$3,431 30	
From rent of privileges	707 85	
From advertising in premium list	162 50	
From assessment on stock	50 00	
From entries for races (horse)	190 00	
From entries for races (bicycle or other)	5 00	
From miscellaneous	61 57	
From State	1,723 33	
Receipts for 1899		6,331 55
Total receipts		$6,386 12

DISBURSEMENTS.

For payment on note	$192 08
For printing and advertising	669 85
For permanent improvements and repairs	413 43
For special attractions	674 25

For labor		$163 81
For materials, supplies and general expenses		561 96
For I. R. tax (two years)		22 93
For National Trotting Association		10 00
For insurance		50 00
For salaries: Secretary, $100; office assistants, $112.50; police, $157.63; judges, $87.55; helpers, etc., $127.75; total		585 43
For race purses (horses)		657 50
For race purses (bicycle or other), including cost of prizes		15 00
For premiums on horses	$243 20	
For premiums on cattle	343 00	
For premiums on sheep	56 00	
For premiums on swine	104 50	
For premiums on poultry	270 90	
For premiums on farm produce	176 50	
For premiums on dairy products	66 00	
For premiums on domestic	371 04	
For premiums on flowers	85 50	
For premiums on fruits	65 00	
For premiums on miscellaneous	404 12	
Total premiums		2,185 76
Total disbursements		$6,202 00
Balance (credit)		$184 12

Geo. H. Hyde ..... President.
Chas. F. Brown ..... Treasurer.

DELAWARE.

RECEIPTS.

From gate receipts	$1,268 00	
From rent of grounds	50 00	
From rent of privileges	184 00	
From entries for premiums	166 00	
From grand stand receipts	94 00	
From State	1,703 49	
Receipts for 1899		$3,465 49
Total receipts		$3,465 49

DISBURSEMENTS.

For payment of bonds, notes or other obligations	$617 08	
For permanent improvements	128 00	
For labor	61 00	
For material	64 81	
For salaries: Secretary, $60; treasurer, $20; office assistants, $41; police, $53.50; judges, $81; superintendent, $19; helpers, etc., $28; total	302 50	
For president	50 00	
For attractions	428 00	
For premiums on horses	$222 90	
For premiums on cattle	300 60	
For premiums on sheep	112 20	
For premiums on swine	80 90	
For premiums on poultry	94 76	
For premiums on farm produce	110 06	

For premiums on dairy products	$20 80	
For premiums on domestic	171 34	
For premiums on implements and machines	9 40	
For premiums on flowers	11 75	
For premiums on fruits	68 35	
For premiums on miscellaneous	145 08	
Total premiums	$1,348 14	
Total disbursements		$3,000 03
Balance (credit)		$465 46

W. H. Fisher ..... President.
W. D. Smith ..... Treasurer.

DUTCHESS.

RECEIPTS.

Balance on hand at close of fiscal year 1898		$143 92
From gate receipts	$7,089 90	
From rent of privileges	1,478 03	
From entries for premiums	1,174 85	
From stock sold	200 00	
From entries for races (horse)	447 50	
From donations	200 00	
From bonds issued, notes given or any other obligation	3,750 00	
From State	4,352 55	
Receipts for 1899		18,692 83
Total receipts		$18,836 75

DISBURSEMENTS.

For payment of bonds, notes or other obligations		$7,066 63
For attractions		848 75
For advertising and printing		1,795 74
For labor		694 03
For material		1,070 11
For salaries: Secretary, $190; treasurer, $200; office assistants, $189.50; police, $210; judges, $151.33; superintendent, $181.68; helpers, etc., $140; total		1,262 51
For race purses (horses)		1,177 50
For premiums on horses	$1,125 00	
For premiums on cattle	1,093 00	
For premiums on sheep	190 00	
For premiums on swine	31 00	
For premiums on poultry,	1,557 50	
For premiums on farm produce	173 00	
For premiums on dairy products	5 00	
For premiums on domestic,	23 75	
For premiums on flowers	50 00	
For premiums on fruits	223 00	
For premiums on miscellaneous	178 75	
Total premiums		4,650 00
Total disbursements		$18,565 27
Balance (credit)		$271 48

Reginald W. Rives ..... President.
Augustus B. Gray ..... Treasurer.

ERIE.

RECEIPTS.

Balance on hand at close of fiscal year 1898.....		$86 43
From gate receipts	$4,392 75	
From rent of privileges	900 42	
From entries for premiums	153 82	
From annual members	445 00	
From entries for races (horse).....	757 51	
From score cards	33 40	
From bonds issued, notes given or any other obligation	700 00	
From State	2,599 60	
Receipts for 1899		9,982 50
Total receipts		$10,068 93

DISBURSEMENTS.

For payment of bonds, notes and other obligations	$711 10
For State Association, dues and internal revenue	160 51
For permanent improvements	1,178 50
For marshal	25 00
For labor	312 50
For material	201 26
For insurance	207 00
For attractions	645 50
For printing and advertising	280 30
For salaries: Secretary, $50; treasurer, $50; office assistants, $250.63; police, $169; judges, $60.45; helpers, etc., $610.06; total.....	1,190 14
For race purses (horses)	1,600 00

For premiums on horses ...	$465 00	
For premiums on cattle	462 00	
For premiums on sheep ...	62 50	
For premiums on swine ...	205 00	
For premiums on poultry..	334 25	
For premiums on farm produce	174 75	
For premiums on dairy products	16 00	
For premiums on domestic.	730 00	
For premiums on implements and machines	81 00	
For premiums on flowers ..	92 00	
For premiums on fruits ...	87 00	
For premiums on miscellaneous	122 15	
Total premiums		$2,831 65
Total disbursements		$9,343 46
Balance (credit)		$725 47

Edward E. Hepp ..... President.
John A. Kloepfer ..... Treasurer.

ESSEX.

RECEIPTS.

Balance on hand at close of fiscal year 1898.....		$316 04
From gate receipts	$2,117 50	
From rent of grounds	348 25	
From entries in Futurity stakes	174 50	
From entries for races (horse).....	441 00	

From rebate on internal revenue, $1.66; score cards, $15.50; miscellaneous, $0.46	$17 62	
From donations, advertising in premium lists	54 75	
From State	1,413 88	
Receipts for 1899		$4,567 50
Total receipts		$4,883 54

DISBURSEMENTS.

For payment of band and other obligations	$140 00	
For purchase of land, printing and advertising	309 24	
For permanent improvements	100 00	
For attractions, Frank La Basso troupe, $150; base ball, $100	250 00	
For labor, not in permanent improvements	130 00	
For salaries: Secretary, $50; treasurer, $50; office assistants, $27.50; police, $87.75; judges, $120; superintendent, $31.75; helpers, etc., $26.50; total	393 50	
For race purses (horses)	1,432 50	
For marshals	33 00	
For miscellaneous	250 34	
For premiums on horses	$152 10	
For premiums on cattle	163 90	
For premiums on sheep	120 60	
For premiums on swine	33 30	
For premiums on poultry	21 72	
For premiums on farm produce	38 95	

For premiums on dairy products	$9 62	
For premiums on domestic	59 12	
For premiums on implements and machines	49 20	
For premiums on flowers	4 95	
For premiums on fruits	18 02	
For premiums on miscellaneous	70 79	
Total premiums		$742 27
Total disbursements		$3,780 85
Balance, cash, including Futurity stakes (credit)		$1,102 69

W. A. Tucker ..... President.
A. J. Daniels ..... Treasurer.

FRANKLIN.

RECEIPTS.

Balance on hand at close of fiscal year 1898		$1,248 52
From gate receipts	$4,227 36	
From rent of grounds	25 00	
From rent of privileges	1,369 50	
From entries for premiums	1,800 00	
From entries for races (horse)	4,193 75	
From insurance on barn buildings	1,240 00	
From program	50 00	
From grand stand	1,743 25	
From State	2,255 36	
Receipts for 1899		16,904 42
Total receipts		$18,152 94

DISBURSEMENTS.

For bands		$280 00
For base ball		252 50
For purchase of land		105 15
For permanent improvements, new barn		2,829 78
For superintendent of halls and helpers		112 75
For labor		738 56
For material		123 62
For horse racing		7,395 00
For advertising, printing, postage, telegraph and expenses		1,355 19
For hay and straw, $209; attractions, $600; total		809 00
For salaries: Secretary, $200; treasurer, $150; office assistants, $112; police, $175; president, $100; superintendent, $50; helpers, etc., $115.25; total		902 25
For race purses (horses)		175 00
For cost of prizes, drum, judges and hall		77 00
For insurance, $192.62; trucking, $39; water rent, $100; total		331 62
For miscellaneous		215 33
For premiums on horses	$290 00	
For premiums on cattle	489 00	
For premiums on sheep	138 00	
For premiums on swine	84 00	
For premiums on poultry	91 75	
For premiums on farm produce	80 75	

For premiums on dairy products	$54 00		
For premiums on domestic	329 75		
For premiums on implements and machines	19 00		
For premiums on flowers	56 00		
For premiums on fruits	52 00		
For premiums on miscellaneous	325 75		
Total premiums		$2,010 00	
Total disbursements			$17,732 75
Balance (credit)			$420 19

Edward W. Lawrence ..... President.
Thomas Adams ..... Treasurer.

FULTON.

RECEIPTS.

Balance on hand at close of fiscal year 1898		$100 00
From gate receipts	$3,947 55	
From grand-stand	1,883 50	
From rent of grounds	742 12	
From rent of privileges	950 95	
From entries for premiums	405 45	
From annual members	156 00	
From life members	40 00	
From entries for races (horse)	1,270 00	
From unpaid premiums of 1898	25	

From State	$2,845 32	
From suspensions	65 00	
Receipts for 1899		$11,306 14
Total receipts		$11,406 14

DISBURSEMENTS.

For payment of notes or other obligations	$2,697 67	
For permanent improvements	350 00	
For insurance	54 27	
For labor	643 44	
For material	44 90	
For attractions and music	572 50	
For printing and advertising	283 31	
For hay, straw and feed	132 84	
For salaries: Secretary, $100; treasurer, $100; office assistants, $20; police, $97.21; judges, $165.11; superintendent, $72; helpers, etc., $322.31; total	876 63	
For race purses (horses)	2,755 00	
For miscellaneous	343 08	
For premiums on horses	$188 00	
For premiums on cattle	468 00	
For premiums on sheep	130 00	
For premiums on swine	255 00	
For premiums on poultry	511 00	
For premiums on farm produce	254 75	
For premiums on dairy products	14 00	
For premiums on domestic	543 95	

For premiums on implements and machines	$43 00		
For premiums on flowers...	25 00		
For premiums on fruits ...	26 50		
For premiums on miscellaneous	82 00		
Total premiums.		$2,541 20	
Total disbursements.			$11,294 84
Balance (credit)			$111 30

James I. Younglove ..... President.
Henry W. Potter ..... Treasurer.

GENESEE.

RECEIPTS.

Balance on hand at close of fiscal year 1898		$841 62
From gate receipts	$3,436 25	
From rent of grounds	55 00	
From rent of privileges, $411.50; advertisements in catalogue, $62; total,	473 50	
From annual members	481 00	
From life members	100 00	
From entries for races (horse)	357 50	
From notes given	2,000	
From State	1,843 44	
Receipts for 1899		8,746 69
Total receipts		$9,588 31

DISBURSEMENTS.

For interest and insurance		$114 75
For postage, $20; telegraphing, $4.47; war tax, $8.33; revenue stamps, $10; total		42 80
For permanent improvements		5,328 15
For labor (day and team)		277 09
For material		120 78
For gate-keepers, $40.50; expenses directors' meetings during year, $54.25; total		94 75
For bands, $127; attractions, $100; printing and advertising, $429.17; total		656 17
For meals to officers and helpers, $108.25; dues, $20; sundries, $40.33; total		168 58
For salaries: Secretary, $100; treasurer, $25; office assistants, $55; police, $117; judges, $35; superintendent, $73.05; total		405 05
For race purses (horses)		710 00
For premiums on horses	$342 00	
For premiums on cattle	187 00	
For premiums on sheep	218 00	
For premiums on swine	125 00	
For premiums on poultry	116 00	
For premiums on farm produce	69 50	
For premiums on dairy products	27 00	
For premiums on domestic	133 50	
For premiums on implements and machines	31 00	

For premiums on flowers...	$45 00	
For premiums on fruits	108 00	
For premiums on miscellaneous	203 20	
Total premiums	$1,605 20	
Total disbursements.		$9,523 32
Balance (credit)		$64 99

C. W. Roberts . . . . . President.
C. D. Harris . . . . . Treasurer.

GREENE.

RECEIPTS.

From gate receipts	$1,976 25	
From rent of grounds	102 85	
From rent of privileges	796 75	
From entries for premiums	84 00	
From annual members	17 00	
From life members	10 00	
From entries for races (horse)	365 00	
From bonds issued, notes given or any other obligation	400 00	
From State	1,391 28	
Receipts for 1899		$5,143 13
Total receipts		$5,143 13

DISBURSEMENTS.

Balance due treasurer at close of fiscal year 1898..		$226 01
For payment of bonds, notes or other obligations	$1,098 16	

For permanent improvements		$200 00	
For labor and material		800 20	
For salaries, etc.		500 00	
For race purses (horses)		1,077 00	
For premiums on horses	$76 00		
For premiums on cattle	109 00		
For premiums on sheep	38 00		
For premiums on swine	23 00		
For premiums on poultry	36 00		
For premiums on farm produce	29 50		
For premiums on dairy products	12 50		
For premiums on domestic	81 50		
For premiums on implements and machines	4 00		
For premiums on flowers	16 25		
For premiums on fruits	12 00		
For premiums on miscellaneous	107 50		
Total premiums		545 25	
			$4,220 61
Total disbursements			$4,446 62
Balance (credit)			$696 51

Francis G. Walters . . . . . President.
Chester E. Whitcomb . . . . . Treasurer.

HERKIMER.

RECEIPTS.

Balance on hand at close of fiscal year 1898		$280 00
From gate receipts	$2,884 75	
From rent of grounds	122 85	

From rent of privileges	$384 50	
From life members	500 00	
From entries for races (horse)	302 50	
From rebate on insurance	35 00	
From donations	41 85	
From State	1,634 40	
Receipts for 1899		$5,905 85
Total receipts		$6,185 85

DISBURSEMENTS.

For payment of bonds, notes or other obligations	$596 00	
For permanent improvements	1,324 85	
For insurance	49 60	
For labor	374 99	
For material	500 97	
For special attractions	325 00	
For internal revenue license tax	8 44	
For National Trotting Association dues,	15 00	
For salaries: Secretary, $75; treasurer, $50; office assistants, $108; police, $117.25; judges, $26.50; superintendent, $55; helpers, etc., $15; total	446 75	
For race purses (horses)	950 00	
For premiums on horses	$146 00	
For premiums on cattle	308 50	
For premiums on sheep	36 50	
For premiums on swine	81 00	
For premiums on poultry	40 00	
For premiums on farm produce	113 50	
For premiums on dairy products	90 98	

For premiums on domestic..	$325 60		
For premiums on implements and machines	30 00		
For premiums on flowers....	26 00		
For premiums on fruits	51 75		
For premiums on miscellaneous	38 25		
Total premiums		$1,288 08	
Total disbursements.			$5,879 68
Balance (credit)			$306 17

J. W. Humphrey ..... President.
B. Mannion ..... Treasurer.

JEFFERSON.

RECEIPTS.

From gate receipts	$3,841 81	
From rent of privileges	989 00	
From annual members	987 00	
From life members, grand-stand.....	1,070 95	
From entries for races (horse)	835 00	
From insurance	1,386 00	
From donations, received from barn or grounds	185 50	
From bonds issued, notes given or any other obligation, miscellaneous	49 30	
From State	2,658 32	
Total receipts		$12,002 88

DISBURSEMENTS.

Balance due at close of fiscal year 1898,		$818 50	
For permanent improvements and material		2,190 71	
For attractions		446 70	
For labor		1,356 84	
For salaries: Secretary, $200; treasurer, $125; rent of track, $400; printing, $521.24; insurance, $57.52; miscellaneous, $630.47; total		1,609 23	
For race purses (horses)		1,957 50	
For premiums on horses	$329 00		
For premiums on cattle	583 50		
For premiums on sheep	131 00		
For premiums on swine	249 00		
For premiums on poultry	602 50		
For premiums on farm produce	165 70		
For premiums on dairy products	33 00		
For premiums on domestic	315 00		
For premiums on flowers	137 70		
For premiums on fruits	67 25		
For premiums on miscellaneous	236 75		
Total premiums		2,850 40	
Total disbursements			$11,554 88
Balance (credit)			$448 00

Walter Zimmerman . . . . . President.
C. E. Hadcock . . . . . Treasurer.

LEWIS.

RECEIPTS.

Balance on hand at close of fiscal year 1898.....		$320 75
From gate receipts	$2,818 50	
From rent of grounds	16 50	
From rent of privileges	485 40	
From annual members	932 00	
From life members.....	20 00	
From entries for races (horse).....	230 00	
From hay sold	40 00	
From State	1,729 10	
Receipts for 1899		6,271 50
Total receipts		$6,592 25

DISBURSEMENTS.

For payment of bonds, notes or other obligations	$1,174 50	
For permanent improvements	288 05	
For attractions, $798; music, $287; printing, $315.25; total	1,400 25	
For labor	92 91	
For material	95 50	
For insurance, office rent, dues, water, lighting, express, stationery, postage and incidentals	300 00	
For salaries: Secretary, $100; treasurer, $75; office assistants, $89.50; police, $145; judges; $53.62; superintendent, $96; helpers, etc., $85; total	644 12	
For race purses (horses)	648 65	
For premiums on horses ... $169 00		

For premiums on cattle....	$246 00	
For premiums on sheep ...	19 50	
For premiums on swine	70 00	
For premiums on poultry ..	74 00	
For premiums on farm produce	52 50	
For premiums on dairy products	64 80	
For premiums on domestic..	189 50	
For premiums on implements and machines	38 50	
For premiums on flowers ...	63 50	
For premiums on fruits	41 75	
For premiums on miscellaneous	38 25	
Total premiums		$1,067 30
Total disbursements		$5,711 28
Balance (credit)		$880 97

George Sherwood . . . . . President.
Ira Sharp . . . . . Treasurer.

BROOKFIELD — MADISON COUNTY AGRICULTURAL SOCIETY.

RECEIPTS.

Balance on hand at close of fiscal year 1898.....		$445 84
From gate receipts	$621 85	
From rent of privileges	349 50	
From annual members	1,061 50	
From miscellaneous	15 70	

From entries for races (horse)	$440 00	
From grand stand	322 85	
From bonds issued, notes given or any other obligation	947 20	
From State	1,503 21	
Receipts for 1899		$5,261 81
Total receipts		$5,707 65

DISBURSEMENTS.

For payment of bonds, notes or other obligations	$509 17	
For permanent improvements	1,131 84	
For labor	771 59	
For material	376 70	
For premiums, 1898	4 00	
For music	110 00	
For attractions	295 30	
For salaries: Secretary, $30; treasurer, $30; office assistants, $15; police, $25.62; judges, $50.12; superintendent, $75.41; helpers, etc., $37.60; total	263 75	
For race purses (horses)	1,000 00	
For premiums on horses	$207 00	
For premiums on cattle	302 00	
For premiums on sheep	68 00	
For premiums on swine	14 00	
For premiums on poultry	126 25	
For premiums on farm produce	64 50	
For premiums on dairy products	1 50	
For premiums on domestic	187 65	

For premiums on flowers...	$16 15	
For premiums on fruits	13 50	
For premiums on miscellaneous	15 45	
Total premiums	$1,016 00	
Total disbursements		$5,478 15
Balance (credit)		$229 50

H. L. Spooner . . . . . President.
B. G. Stillman, Jr. . . . . Treasurer.

MONTGOMERY.

RECEIPTS.

Balance on hand at close of fiscal year 1898. . . .		$102 48
From gate receipts	$1,998 65	
From rent of grounds	44 90	
From rent of privileges	445 25	
From annual members	137 00	
From life members	40 00	
From entries for races (horse)	380 00	
From hay sold	41 59	
From bonds issued, notes given or any other obligation	1,784 76	
From State	1,875 54	
Receipts for 1899		6,747 69
Total receipts		$6,850 17

DISBURSEMENTS.

For payment of bonds, notes or other obligations	$1,261 00
For music	130 00

For permanent improvements		$266 18	
For attractions		350 00	
For labor		375 49	
For material		245 97	
For printing		188 05	
For miscellaneous		138 16	
For salaries: Secretary, $125; treasurer, $40; office assistants, $46.63; police, $33; judges, $73.50; superintendent, $158; helpers, etc., $21.88; total		498 01	
For race purses (horses)		1,377 50	
For executive committee		75 00	
For premiums on horses	$273 00		
For premiums on cattle	303 00		
For premiums on sheep	113 00		
For premiums on swine	122 00		
For premiums on poultry	158 25		
For premiums on farm produce	110 50		
For premiums on dairy products	102 15		
For premiums on domestic	216 50		
For premiums on implements and machines	20 00		
For premiums on miscellaneous	61 10		
Total premiums		1,479 50	
Total disbursements			$6,384 86
Balance (credit)			$465 31

A. C. Phillips ..... President.
William Wiles. ..... Treasurer.

AMERICAN INSTITUTE OF THE CITY OF NEW YORK.

RECEIPTS.

Balance on hand at close of fiscal year 1898, November 30		$8,550 86
From gate receipts	$453 24	
From rent of grounds	7,952 43	
From rent of privileges	101 14	
From annual members	495 00	
From interest on United States bonds and balances	1,138 30	
From miscellaneous	51 86	
From State	1,984 43	
Receipts for 1899		12,176 41
Total receipts		$20,727 27

DISBURSEMENTS.

For permanent improvements	$86 50	
For Sixty-seventh Fair, 1898, National Academy Design	133 18	
For Sixty-eighth Fair, 1899, Berkely Lyceum	370 41	
For general maintenance and removal	6,435 93	
For salaries: Office assistants, C. and M., $1,920; superintendent and clerk, $204.35; helpers, etc., $421.41; total	2,545 76	
For premiums on farm produce	$219 00	

For premiums on implements and machines	$574 00	
For premiums on flowers	236 00	
Total premiums	$1,029 00	
Total disbursements		$10,600 78
Balance, December 1, 1899 (credit)		$10,126 49

Henry G. Gabay ..... President.
Geo. H. Toop ..... Treasurer.

NIAGARA.

RECEIPTS.

Balance on hand at close of fiscal year 1898		$126 52
From gate receipts	$2,198 85	
From rent of grounds	45 00	
From rent of privileges	110 90	
From annual members	224 00	
From life members	40 00	
From entries for races (horse)	259 10	
From entries for races (bicycle or other),	25 15	
From bonds issued, notes given or any other obligation	999 25	
From State	1,579 76	
Receipts for 1899		5,482 01
Total receipts		$5,608 53

DISBURSEMENTS.

Accounts due at close of fiscal year 1898, not paid, but paid in 1899...		$448 27
For payment of bonds, notes or other obligations		1,355 33
For permanent improvements		100 00
For labor		203 58
For material		184 54
For attractions		300 00
For taxes, internal revenue, insurance		65 26
For advertising and printing		283 97
For salaries: Secretary, $119; treasurer, $100; office assistants, $63; police, $218; directors, $84; helpers, etc., $102.58; total		686 58
For race purses (horses)		555 00
For race purses (bicycle or other), including cost of prizes		50 00
For premiums on horses	$151 00	
For premiums on cattle	88 00	
For premiums on sheep	80 00	
For premiums on swine	52 00	
For premiums on poultry	137 50	
For premiums on farm produce	59 30	
For premiums on dairy products	10 00	
For premiums on domestic	232 50	
For premiums on implements and machines	22 00	
For premiums on flowers	69 00	
For premiums on fruits	87 00	

For premiums on miscellaneous	$47 50	
Total premiums	$1,035 80	
Total disbursements		$5,268 33
Balance (credit)		$340 20
Ruthwen Kill		President.
J. S. Woodward		Treasurer.

ONEIDA.

RECEIPTS.

Balance on hand at close of fiscal year 1898		$74 24
From gate receipts	$2,137 23	
From rent of grounds	500 00	
From rent of privileges	563 50	
From annual members	332 00	
From life members	40 00	
From entries for races (horse)	840 00	
From grand-stand	383 85	
From hay sold	21 80	
From bonds issued, notes given or any other obligation	150 00	
From State	1,495 76	
Receipts for 1899		6,463 84
Total receipts		$6,538 08

DISBURSEMENTS.

For payment of bonds, notes or other obligations	$446 60	
For insurance, $109; amusements, $165; total	274 00	

For dividends, Association County Agricultural Societies		$39 02
For labor		316 89
For material		728 30
For membership in National Trotting Association		15 00
For revenue tax and stamps		16 00
For miscellaneous bills		152 05
For salaries: Secretary, $50; treasurer, $50; office assistants, $74; police, $153.50; judges, $50; superintendent, $14.50; total		392 00
For race purses (horses)		1,790 00
For premiums due 1898, paid 1899		20 00
For premiums on horses	$224 00	
For premiums on cattle	519 00	
For premiums on sheep	118 50	
For premiums on swine	57 00	
For premiums on poultry	156 50	
For premiums on farm produce	65 50	
For premiums on dairy products	19 25	
For premiums on domestic	308 00	
For premiums on flowers	27 00	
For premiums on fruits	83 50	
Total premiums		1,578 25
Total disbursements		$5,768 11
Balance (credit)		$769 97

John W. Potter ..... President.
W. D. Reese ..... Treasurer.

ONONDAGA.

RECEIPTS.

Balance on hand at close of fiscal year 1898.....		$110 11
From gate receipts	$3,290 60	
From rent of grounds	2,440 68	
From rent of privileges	776 25	
From entries for premiums.....	383 05	
From insurance	1,599 22	
From entries for races (horse).....	150 00	
From bonds issued, notes given or any other obligation	7,450 00	
From miscellaneous	52 75	
From State	2,315 98	
Receipts for 1899		18,458 53
Total receipts		$18,568 64

DISBURSEMENTS.

For payment of bonds, notes or other obligations	$5,372 27
For advertising	712 70
For permanent improvements	507 74
For postage, revenue stamps, license..	132 25
For labor	382 04
For material	141 74
For attractions, music, etc	613 60
For bills contracted in 1898.....	1,959 17
For salaries: Secretary and treasurer, $400; office assistants, $250.20; police, $416; judges, $20.50; superintendent, etc., $322.75; total	1,409 45
For race purses (horses).....	996 50
For rent of grounds for two years....	3,600 00

For miscellaneous expenses of minor nature		$374 60
For premiums on horses	$201 00	
For premiums on cattle	317 00	
For premiums on sheep	74 00	
For premiums on swine	230 00	
For premiums on poultry	432 00	
For premiums on farm produce	81 40	
For premiums on dairy products	20 00	
For premiums on domestic	266 55	
For premiums on flowers	75 00	
For premiums on fruits	129 00	
For premiums on miscellaneous	148 00	
Total premiums		1,973 95
Total disbursements		$18,877 48
Balance (debit)		$305 84

Stephen Thornton ..... President.
N. H. Chapman ..... Treasurer.

ONTARIO.

RECEIPTS.

Balance on hand at close of fiscal year 1898		$10 27
From gate receipts	$1,853 57	
From rent of grounds	70 00	
From rent of privileges	240 00	
From entries for premiums	43 08	

From annual members	$254 00	
From grand-stand	111 00	
From entries for races (horse)	232 50	
From advertising	104 00	
From bonds issued, notes given or any other obligation	220 00	
From State	1,990 09	
Receipts for 1899		$5,118 24
Total receipts		$5,128 51

DISBURSEMENTS.

Balance due at close of fiscal year 1898.	$3 92	
For payment of bonds, notes or other obligations	901 96	
For permanent improvements, grounds, building and fences	502 02	
For printing bills	408 24	
For labor	76 50	
For hay and straw	109 53	
For attractions at the fair, $165; band, $60; total	225 00	
For postage, $30.37; license and revenue stamps, $9.33; insurance, $83.82; total	123 52	
For other expenses of the fair	227 88	
For salaries: Secretary, $50; treasurer, $50; office assistants, $130; police, $95.75; judges, $37.16; superintendent, $50; helpers, etc., $29; total	441 91	
For race purses (horses)	601 00	
For race purses (bicycle or other), including cost of prizes	20 00	

For premiums on horses	$233 00	
For premiums on cattle	120 00	
For premiums on sheep	218 00	
For premiums on swine	203 00	
For premiums on poultry ...	190 50	
For premiums on farm produce	221 47	
For premiums on domestic ..	246 00	
For premiums on miscellaneous.	147 85	
Total premiums		$1,478 82
Total disbursements		$5,120 30
Balance (credit)		$7 71

C. P. Whitney ..... President.
James S. Hickox ..... Treasurer.

ORANGE.

RECEIPTS.

Balance on hand at close of fiscal year 1898		$3 45
From gate receipts	$4,748 75	
From rent of privileges	857 50	
From entries for premiums	271 50	
From annual members	366 00	
From entries for races (horse)	365 00	
From score cards, $36.90; stables, $89.70; total	126 60	
From donations	349 50	

From bonds issued, notes given or any other obligation	$4,600 00	
From State	3,161 45	
Receipts for 1899		$14,846 30
Total receipts		$14,849 75

DISBURSEMENTS.

Balance due at close of fiscal year 1898.	$265 00	
For payment of note, $6,500; interest, $601.61; total	7,101 61	
For permanent improvements	200 00	
For labor	495 63	
For material	365 41	
For tents	242 95	
For advertising and printing, $686.26; dinner for judges, $54; music, $155; total	895 26	
For insurance, $96.94; hay and feed, $113.23; plumbing, $25; rent, $5; total	240 17	
For salaries: Secretary, $50; treasurer, $50; office assistants, $115; police, $153; livery, $22; judges, $112.50; superintendent, $105; helpers, etc., $104.09; total	711 59	
For race purses (horses)	902 50	
For premiums on horses	$345 00	
For premiums on cattle	536 00	
For premiums on sheep	14 00	
For premiums on swine	18 00	
For premiums on poultry	452 00	
For premiums on farm produce	271 50	
For premiums on dairy products	20 00	

For premiums on domestic..	$377 00	
For premiums on implements and machines	214 00	
For premiums on flowers ..	117 50	
For premiums on fruits	300 25	
For premiums on miscellaneous	245 75	
Total premiums	$2,911 00	
Total disbursements		$14,331 12
Balance (credit)		$518 63

Augustus Denniston ..... President.
H. M. Howell ..... Treasurer.

ORLEANS.

RECEIPTS.

Balance on hand at close of fiscal year 1898.....		$57 74
From gate receipts	$1,361 26	
From rent of grounds	39 50	
From rent of privileges	640 95	
From annual members	1,662 00	
From life members	60 00	
From grand-stand	170 32	
From hay, corn, fodder, etc., sold...	42 27	
From interest on mortgage owned by society	49 80	
From bonds issued, notes given or any other obligation	700 00	
From State	1,959 59	
Receipts for 1899		6,685 69
Total receipts		$6,742 43

DISBURSEMENTS.

For payment of notes or other obligations		$700 00	
For insurance		18 13	
For permanent improvements		1,830 17	
For labor		502 17	
For material		511 40	
For salaries: Secretary, $75; treasurer, $75; office assistants, $50.50; police, $98.83; judges, $55.52; superintendent, $87; helpers, etc., $59.50; total,		501 35	
For premiums on horses	$350 00		
For premiums on cattle	189 00		
For premiums on sheep	245 00		
For premiums on swine	82 00		
For premiums on poultry	143 25		
For premiums on farm produce	68 00		
For premiums on domestic	129 50		
For premiums on implements and machines	48 00		
For premiums on flowers	89 00		
For premiums on fruits	76 25		
For premiums on miscellaneous	1 75		
Total premiums		1,421 75	
Total disbursements			$5,983 97
Balance (credit)			$758 46

Henry Blood ..... President.
A. W. Barnett ..... Treasurer.

OSWEGO.

RECEIPTS.

Balance on hand at close of fiscal year 1898		$557 06
From gate receipts	$4,268 77	
From rent of grounds	157 50	
From rent of privileges	438 31	
From life members	10 00	
From entries for races (horse)	218 50	
From donations	269 84	
From State	2,351 60	
Receipts for 1899		7,714 52
Total receipts		$8,271 58

DISBURSEMENTS.

For payment of interest on mortgage	$250 00	
For permanent improvements	1,694 24	
For labor	383 81	
For material	163 40	
For insurance, $84.78; printing, $132.95; tents, $76; music, $110; total	403 73	
For revenue tax, $8.34; State convention fee, $10; delegates to State convention, $30.70; total	49 04	
For salaries: Secretary, $75; treasurer, $40; office assistants, $50; police, $155.50; judges, $130.49; superintendent, $173; helpers, etc., $140; total	763 99	
For race purses (horses)	986 00	
For special attractions	275 00	
For premiums on horses	$462 00	

For premiums on cattle	$486 00	
For premiums on sheep	177 00	
For premiums on swine	230 00	
For premiums on poultry ...	256 50	
For premiums on farm produce	154 50	
For premiums on dairy products	71 25	
For premiums on domestic ..	181 75	
For premiums on flowers ..	43 50	
For premiums on fruits	68 50	
For premiums on miscellaneous	368 50	
Total premiums	$2,499 50	
Total disbursements		$7,468 71
Balance (credit)		$802 87

H. H. Merriam ..... President.
Jay C. Harrington ..... Treasurer.

OTSEGO.

RECEIPTS.

Balance on hand at close of fiscal year 1898.....		$112 20
From rent of grounds	$2,289 50	
From rent of privileges	530 25	
From entries for premiums	25 00	
From annual members	485 00	
From life members	10 00	

From entries for races (horse)	$323 75	
From grand-stand	245 42	
From State	2,197 69	
Receipts for 1899		$6,106 61
Total receipts		$6,218 81

DISBURSEMENTS.

For payment of bonds, notes or other obligations, $200, principal; $12, interest	$212 00	
For permanent improvements, including work on same	615 10	
For labor	361 21	
For material	472 18	
For special attractions	630 50	
For sundries and other expenses	350 21	
For salaries: Secretary, $75; treasurer, $50; office assistants, $63.50; police, $119.75; judges, $65.78; superintendent, $90; helpers, etc., $22; total	486 03	
For race purses (horses)	1,050 00	
For premiums on horses	$131 00	
For premiums on cattle	772 00	
For premiums on sheep	218 00	
For premiums on swine	41 00	
For premiums on poultry	125 75	
For premiums on farm produce	72 05	
For premiums on dairy products	32 00	
For premiums on domestic	183 50	
For premiums on implements and machines	59 00	

For premiums on flowers...	$25 00	
For premiums on fruits	46 50	
For premiums on miscellaneous	188 50	
Total premiums	$1,894 30	
Total disbursements		$6,071 53
Balance (credit)		$147 28

G. W. Parshall ..... President.
H. K. Murdock ..... Treasurer.

PUTNAM.

RECEIPTS.

From gate receipts	$1,310 00	
From rent of privileges	275 00	
From grand-stand	371 25	
From score cards	90 00	
From entries for races (horse)	650 00	
From State, August 26, 1899	526 10	
From State, Oct. 3, 1899	856 13	
Receipts for 1899		$4,078 98
Total receipts		$4,078 98

DISBURSEMENTS.

Balance due at close of fiscal year 1898,	$230 00	
For payment of interest on note	60 00	
For insurance, $40; starter, $50; interest on revenue tax, $35.48; total	125 48	

For permanent improvements		$100 00	
For printing, $140; advertising, $100; band, $125; total		365 00	
For labor		81 00	
For material		23 50	
For salaries: Secretary, $56; treasurer, $42; office assistants, $65; police, $125; judges, $25; superintendent, $15; helpers, etc., $50; total.....		378 00	
For race purses (horses)		1,700 00	
For premiums on horses	$65 00		
For premiums on cattle	63 00		
For premiums on farm produce	52 00		
For premiums on dairy products	20 25		
For premiums on domestic ..	163 00		
For premiums on flowers ...	75 00		
For premiums on fruits	52 75		
For premiums on miscellaneous	25 00		
Total premiums		516 00	
Total disbursements			$3,578 98
Balance in bank December 1, 1899			$500 00

Philip Diehl ..... President.
Edward C. Weeks ..... Treasurer.

QUEENS.

RECEIPTS.

Balance on hand at close of fiscal year 1898.....		$5,150 07
From gate receipts	$12,132 90	
From rent of carriage sheds	394 00	
From rent of privileges	2,261 85	
From entries for premiums (poultry)..	214 75	
From annual members	2,025 00	
From life members	225 00	
From entries for races (horse)	4,633 75	
From entries for races (bicycle)	139 00	
From carriage tickets (annual)	449 00	
From notes given	3,400 00	
From miscellaneous	69 39	
From State	3,828 11	
Receipts for 1899		29,772 75
Total receipts		$34,922 82

DISBURSEMENTS.

For payment of bonds, notes or other obligations	$7,400 00
For debts of 1898	146 75
For interest	853 30
For insurance	595 71
For labor	1,350 84
For printing and stationery	730 63
For incidental expenses	4,378 62
For salaries: Secretary, $600; treasurer, $750; police, $465.22; judges, $372.30; superintendent, $75; helpers, etc., $1,984.50; total	4,247 02
For race purses (horses)	7,504 98

For race purses (bicycle or other), including cost of prizes	$441 00	
For premiums on horses	$195 00	
For premiums on cattle	668 00	
For premiums on sheep	125 00	
For premiums on swine	245 00	
For premiums on poultry	689 00	
For premiums on farm produce	550 50	
For premiums on domestic	579 50	
For premiums on implements and machines	190 00	
For premiums on flowers	844 00	
For premiums on fruits	442 00	
For premiums on miscellaneous	604 00	
Total premiums	5,132 00	
Total disbursements		$32,780 85
Balance (credit)		$2,141 97

Geo. P. Titus ..... President.
Thos. H. Bacon ..... Treasurer.

RENSSELAER — AGRICULTURAL AND LIBERAL ARTS SOCIETY OF RENSSELAER.

RECEIPTS.

Balance on hand at close of fiscal year 1898		$126 96
From gate receipts	$1,348 50	
From rent of privileges	710 00	
From entries for premiums	175 00	
From annual members	102 00	
From entries for races (horse)	172 50	

From bonds issued, notes given or any other obligation		$1,500 00	
Receipts for 1899			$4,008 00
Total receipts			$4,134 96

DISBURSEMENTS.

For payment of obligations, back premiums, etc.		$126 96	
For labor		127 60	
For material		158 47	
For miscellaneous		1,101 96	
For printing and advertising		529 45	
For salaries: Police, $68; judges, $85; helpers, etc., $104.19; total		267 19	
For race purses (horses)		599 00	
For premiums on horses	$200 00		
For premiums on cattle	147 75		
For premiums on sheep	160 00		
For premiums on swine	87 00		
For premiums on poultry	134 50		
For premiums on farm produce	103 50		
For premiums on dairy products	13 00		
For premiums on domestic	114 25		
For premiums on flowers	157 25		
For premiums on fruits	57 00		
For premiums on miscellaneous	273 50		
Total premiums		1,447 75	
Total disbursements			4,358 38
Balance (debit)			$223 42

W. H. Sweet ..... President.
C. E. Huested ..... Treasurer.

RENSSELAER — AGRICULTURAL AND HORTICULTURAL SOCIETY.

RECEIPTS.

From gate receipts	$2,436 00	
From grand-stand	339 65	
From rent of privileges	309 65	
From entries for premiums	207 95	
From annual tickets	196 00	
From exhibitors' tickets	121 00	
From entries for races (horse)	815 50	
From donations	29 50	
From bonds issued, notes given or any other obligation	1,200 00	
Receipts for 1899		$5,655 25
Total receipts		$5,655 25

DISBURSEMENTS.

Balance due at close of fiscal year 1898,	$786 76	
Due for payment of bonds, notes or other obligations	786 54	
For rent of grounds	200 00	
For permanent improvements	200 49	
For music, $359.60; performances, $600; total	959 60	
For labor	55 00	
For expense account	213 22	
For lighting grounds, $145.42; hay and straw, $100.25; total	245 67	

For advertising account		$722 42	
For salaries: Secretary, $50; office assistants, $190; police, $92.90; judges, $45.50; superintendent, $25; total..		303 40	
For race purses (horses)		1,537 00	
For premiums on horses	$131 00		
For premiums on cattle	39 00		
For premiums on sheep	56 00		
For premiums on swine	11 00		
For premiums on rabbits .	1 00		
For premiums on pigeons ..	3 00		
For premiums on poultry ...	539 50		
For premiums on farm produce	60 00		
For premiums on dairy products	3 00		
For premiums on domestic ..	76 00		
For premiums on fine arts...	43 50		
For premiums on flowers ..	60 00		
For premiums on fruits	57 00		
For premiums on culinary..	111 00		
Total premiums		1,191 25	
Total disbursements			$7,201 35
Balance (debit)			$1,546 10

Paul Cook ..... President.
John Knickerbacker ..... Treasurer.

ROCKLAND — AGRICULTURAL AND HORTICULTURAL ASSOCIATION OF ROCKLAND.

RECEIPTS.

Balance on hand at close of fiscal year 1898		$23 65
From gate receipts, $2,142.50; grandstand, $383.50; total	$2,526 00	
From rent of stables, $54.50; advertising in premium book, $27.50; total	82 00	
From rent of privileges	450 31	
From entries for premiums (from poultry)	24 25	
From annual members	619 00	
From entries for races (horse)	1,000 00	
From notes given	350 00	
From State	1,477 20	
Receipts for 1899		6,528 76
Total receipts		$6,552 41

DISBURSEMENTS.

For payment of bonds, notes or other obligations	$650 00
For labor	310 52
For material	403 25
For attractions, $448.50; ground rent, 1898, $250; room rent, $10; total	708 50
For advertising in papers, $44; printing, $257.98; total.	301 98
For expenses, $495.42; tents, $116.93; society dues, $51.62; total	658 97
For salaries: Secretary, $90; treasurer, $50; office assistants, $42; police,	

$127; judges, $102.18; superintendent, $90; helpers, etc., $69; total...		$570 18
For race purses (horses)		1,790 00
For races (bicycle or other), including cost of prizes for cake walk		31 00
For premiums on horses	$158 00	
For premiums on cattle	100 50	
For premiums on sheep	6 00	
For premiums on swine	18 50	
For premiums on poultry ..	154 75	
For premiums on farm produce.....	188 05	
For premiums on domestic ...	36 50	
For premiums on flowers ...	27 25	
For premiums on fruits.....	127 40	
For premiums on miscellaneous.....	190 45	
Total premiums.....		1,007 40
Total disbursements		$6,431 80
Balance (credit)		$120 61

C. Irving Hopper ..... President.
Daniel T. Inglis ..... Treasurer.

ST. LAWRENCE.

RECEIPTS.

From gate receipts	$4,362 30
From rent of grounds	664 60

For rent of privileges	$211 10	
From entries for races (horse)	1,849 00	
From bonds issued, notes given or any other obligation	1,390 72	
From State	2,000 43	
Receipts for 1899		$10,478 15
Total receipts		$10,478 15

DISBURSEMENTS.

For payment of bonds, notes or other obligations	$3,588 87	
For permanent improvements	600 00	
For labor	272 00	
For material	299 03	
For salaries: Secretary, $200; treasurer, $100; office assistants, $83; police, $118; superintendent, $100; helpers, etc., $35.50; total	636 50	
For race purses (horses)	3,483 00	
For premiums on horses	$224 00	
For premiums on cattle	821 00	
For premiums on sheep	77 00	
For premiums on swine	57 00	
For premiums on poultry	150 50	
For premiums on farm produce	108 25	
For premiums on dairy products	28 00	
For premiums on domestic	227 75	
For premiums on implements and machines	60 00	
For premiums on flowers	18 50	
For premiums on fruits	20 00	

For premiums on miscellaneous	$61 50	
Total premiums	$1,853 50	
Total disbursements		$10,732 90
Balance (debit)		$254 75

J. H. Clark . . . . . President.
E. H. Gilbert . . . . . Treasurer.

SARATOGA.

RECEIPTS.

Balance on hand at close of fiscal year 1898		$13 88
From gate receipts	$2,231 25	
From grand-stand	582 81	
From rent of privileges	644 27	
From miscellaneous	37 25	
From annual members	812 00	
From entries for poultry	280 00	
From entries for races (horse)	223 25	
From donations	275 00	
From State	2,113 65	
Receipts for 1899		7,199 48
Total receipts		$7,213 36

DISBURSEMENTS.

For educational day	$119 27
For payment of bonds, notes or other obligations	983 25
For attractions and music	446 00
For permanent improvements	368 18
For printing and advertising	310 55
For labor	288 12

For material and supplies, including hay and feed		$291 59	
For miscellaneous		109 55	
For insurance		73 50	
For superintendents of halls, stock, etc.		60 00	
For salaries: Secretary, $150; treasurer, $75; office assistants, $169.50; police, $99.25; judges, $84.91; superintendent, $25; helpers, etc., $68.50; total		672 16	
For race purses (horses)		1,042 50	
For premiums on horses	$127 00		
For premiums on cattle	334 50		
For premiums on sheep	170 30		
For premiums on swine	148 30		
For premiums on poultry	695 70		
For premiums on farm produce	109 00		
For premiums on dairy products	16 50		
For premiums on domestic	322 55		
For premiums on implements and machines	62 50		
For premiums on flowers	97 00		
For premiums on fruits	64 25		
For premiums on miscellaneous	95 50		
Total premiums		2,243 10	
Total disbursements			$7,007 77
Balance (credit)			$205 59

Douw F. Winney ..... President.
W. I. Cavert ..... Treasurer.

SCHOHARIE.

RECEIPTS.

Balance on hand at close of fiscal year 1898.....		$60 79
From gate receipts	$2,069 03	
From rent of grounds	214 24	
From rent of privileges	461 50	
From entries for premiums	193 00	
From entries for races (horse).....	245 00	
From penalties	51 50	
From donations	30 00	
From bonds issued, notes given or any other obligation	500 00	
From State	2,000 58	
Receipts for 1899		5,764 85
Total receipts		$5,825 64

DISBURSEMENTS.

For payment of bonds, notes or other obligations	$236 30
For permanent improvements	1,240 68
For special attractions	175 00
For labor	155 00
For material	282 59
For insurance	110 00
For postage, advertising, tax, etc.....	251 17
For dues, National Trotting and State Agricultural Associations	58 75
For salaries: Secretary, $50; office assistants, $57.25; helpers, etc., $231.53; total	338 78
For race purses (horses)	1,180 00

For premiums on horses ...	$262 00	
For premiums on cattle ...	440 00	
For premiums on sheep ...	187 00	
For premiums on swine ...	80 00	
For premiums on poultry ..	118 50	
For premiums on farm produce	129 50	
For premiums on dairy products	17 75	
For premiums on domestic..	300 00	
For premiums on implements and machines	2 00	
For premiums on flowers ..	12 00	
For premiums on fruits....	72 00	
For premiums on miscellaneous.	37 50	
Total premiums	$1,658 25	
Total disbursements		$5,686 52
Balance (credit)		$139 12

Daniel W. Jenkins ..... President.
L. G. Van Tuyl ..... Treasurer.

SCHUYLER.

RECEIPTS.

Balance on hand at close of fiscal year 1898.....		$1,330 48
From gate receipts	$722 55	
From grand-stand	22 30	
From rent of grounds	103 50	
From rent of privileges	92 00	
From interest on $800, one year	24 00	

From annual members	$253 00	
From advertisements in premium lists,	28 00	
From labor done at time of summer races	13 38	
From entries for races (horse)	130 00	
From rebate on internal revenue stamp,	78	
From State	1,500 50	
Receipts for 1899		$2,890 01
Total receipts		$4,220 49

DISBURSEMENTS.

For payment of bonds, notes or other obligations, balance on rent of grounds	$171 68
For taxes on grounds	70 48
For dues National Trotting Association, $20; State Association, $68.50,	88 58
For band, printing, internal revenue stamps, speaker, etc.	178 11
For labor	255 90
For material	576 57
For salaries: Secretary, $25; treasurer, $25; office assistants, $13; police, $42.25; judges, $19; superintendent, $5; helpers, etc., $29.10; total	158 35
For race purses (horses)	710 00
For race purses (bicycle or other), including cost of prizes	65 00
Unpaid premiums of 1898	13 50
For premiums on horses ... $179 50	
For premiums on cattle ... 119 50	
For premiums on sheep ... 132 00	

For premiums on swine ...	$39 00	
For premiums on poultry ..	292 50	
For premiums on farm produce	73 90	
For premiums on dairy products	2 00	
For premiums on domestic..	140 00	
For premiums on flowers ..	16 25	
For premiums on fruits ...	138 15	
For premiums on miscellaneous	50 50	
Total premiums		$1,183 30
Total disbursements		$3,471 47
Balance (credit)		$749 02

O. H. Budd ..... President.
G. W. Burrell ..... Treasurer.

SENECA.

RECEIPTS.

Balance on hand at close of fiscal year 1898.....		$218 76
From gate receipts	$788 59	
From rent of privileges	154 00	
From annual members	647 00	
From entries for races (horse).....	98 00	
From State	1,867 34	
Receipts for 1899		3,554 93
Total receipts		$3,773 69

DISBURSEMENTS.

For permanent improvements		$299 31	
For labor		172 00	
For material and expenses		464 45	
For dues State Society		10 00	
For salaries: Office assistants, $72; judges, $38.50; superintendent, $30; helpers, police, etc., $166.95; total		307 45	
For race purses (horses)		220 00	
For premiums on horses	$266 00		
For premiums on cattle	391 00		
For premiums on sheep	170 00		
For premiums on swine	152 00		
For premiums on poultry	204 75		
For premiums on farm produce	40 00		
For premiums on dairy products	9 00		
For premiums on domestic	111 75		
For premiums on implements and machines	28 00		
For premiums on flowers	31 50		
For premiums on fruits	23 00		
For premiums on miscellaneous	12 50		
Total premiums		1,439 50	
Total disbursements			$2,912 71
Balance (credit)			$860 98

Isaac L. Huff ..... President.
Leonard Story ..... Treasurer.

STEUBEN.

RECEIPTS.

Balance on hand at close of fiscal year 1898.....		$375 98
From gate receipts	$2,928 75	
From rent of grounds	5 00	
From rent of privileges	592 00	
From annual members	330 00	
From entries for races (horse).....	350 00	
From bonds issued, notes given, or any other obligation	2,592 56	
From State	742 35	
Receipts for 1899		7,540 66
Total receipts		$7,916 64

DISBURSEMENTS.

For payment of bonds, notes or other obligations	$1,683 38	
For permanent improvements	396 50	
For labor	229 51	
For material	613 48	
For miscellaneous	871 25	
For salaries: Secretary, $300; treasurer, $50; office assistants, $427.37; police, $48.75; judges, $37.62; superintendent, $100; helpers, etc., $46; total	1,009 74	
For race purses (horses).....	930 00	
For premiums on horses ...	$469 00	
For premiums on cattle ...	418 50	
For premiums on sheep ...	290 20	
For premiums on swine ...	374 40	

For premiums on poultry ..	$147 56	
For premiums on farm produce	208 75	
For premiums on dairy products	32 00	
For premiums on domestic..	171 00	
For premiums on flowers ..	28 75	
For premiums on fruits ...	163 25	
For premiums on miscellaneous	363 50	
Total premiums		$2,666 91
Total disbursements		$8,400 77
Balance (debit).		$484 13

Frank Plaisted . ..... President.
E. C. Bennett ..... Treasurer.

SUFFOLK.

RECEIPTS.

Balance on hand at close of fiscal year 1898.....		$424 69
From gate receipts	$4,653 00	
From rent of privileges	621 75	
From life members	50 00	
From entries for races (horse).....	992 50	
From State	2,207 68	
Receipts for 1899		8,524 93
Total receipts		$8,949 62

DISBURSEMENTS.

For permanent improvements	$1,920 00	
For labor	800 50	

For material		$521 53
For freight, $130.52; insurance, $74.88		205 40
For hay and feed, $250; printing, $409.25		659 25
For exhibition of Bicycle Johnnie		75 00
For salaries: Secretary, $200; police, $43.50; judges, $130; helpers, etc., $75; total		448 50
For race purses (horses)		1,997 50
For race purses (bicycle or other), including cost of prizes		150 00
For premiums on horses	$259 00	
For premiums on cattle	371 00	
For premiums on sheep	87 00	
For premiums on swine	108 00	
For premiums on poultry	285 50	
For premiums on farm produce	312 75	
For premiums on domestic	176 75	
For premiums on implements and machines	24 50	
For premiums on flowers	111 50	
For premiums on fruits	98 25	
For premiums on miscellaneous	299 75	
Total premiums		2134 00
Total disbursements		$8,911 66
Balance (credit)		$37 94

Henry A. Reeves ..... President.
George H. Cooper ..... Treasurer.

SULLIVAN.

RECEIPTS.

Balance on hand at close of fiscal year 1898		$955 25
From gate receipts	$1,823 51	
From rent of privileges	235 00	
From annual members	136 00	
From entries for races (horse)	60 00	
From State	1,868 79	
Receipts for 1899		4,123 30
Total receipts		$5,078 55

DISBURSEMENTS.

Balance due at close of fiscal year 1898,		$154 56
For purchase of land		1,012 50
For permanent improvements		83 28
For labor		271 65
For material		198 36
For recording deed		3 05
For State assessment, agricultural societies		10 00
For salaries: Secretary, $50; treasurer, $10; police, $54; judges, $92.54; superintendent, $10; helpers, etc., $46; total		262 54
For race purses (horses)		508 00
For premiums on horses	$197 00	
For premiums on cattle	317 00	
For premiums on sheep	60 25	

For premiums on swine	$33 00	
For premiums on poultry ..	295 95	
For premiums on farm produce	240 80	
For premiums on dairy products	78 70	
For premiums on domestic..	140 25	
For premiums on implements and machines	13 00	
For premiums on flowers ...	68 60	
For premiums on fruits	26 75	
From premiums on miscellaneous	90 00	
Total premiums	$1,561 30	
Total disbursements		$4,065 24
Balance (credit)		$1,013 31

P. R. Pelton ..... President.
S. L. Strong ..... Treasurer.

TIOGA.

RECEIPTS.

Balance on hand at close of fiscal year 1898.....		$163 70
From gate receipts, $1,500.30; membership, $720; total	$2,230 30	
From rent of grounds	211 05	
From rent of privileges	138 50	
From annual members, $7.30, included in gate receipts		

From entries for races (horse)	$420 00	
From bonds issued, notes given, or any other obligation	8,000 00	
From State	1,664 35	
Receipts for 1899		$12,664 20
Total receipts		$12,827 90

DISBURSEMENTS.

For payment of bonds, notes or other obligations (special deposit account, interest)	$400 00	
For purchase of land	5,962 50	
For permanent improvements	2,579 27	
For special attractions, $383.63; advertising, $283.40; total	667 03	
For salaries: Office assistants, $18; police, $30.25; judges, $32.25; superintendent, $30.25; helpers, etc., $95.54; total	158 04	
For race purses (horses)	1,450 00	
For insurance, $16; State association, $10; supplies, $82.88; total	108 88	
For premiums on horses	$137 00	
For premiums on cattle	270 50	
For premiums on sheep	83 00	
For premiums on swine	30 00	
For premiums on poultry	131 00	
For premiums on farm produce	118 40	
For premiums on dairy products	21 10	
For premiums on domestic	200 15	

For premiums on implements and machines	$4 00	
For premiums on flowers	20 00	
For premiums on fruits	15 15	
For premiums on miscellaneous	62 75	
Total premiums		$1,092 05
Total disbursements		$12,066 02
Balance (credit)		$761 88

George A. Ingersoll . . . . . President.
J. M. Hastings . . . . . Treasurer.

TOMPKINS.

RECEIPTS.

Balance on hand at close of fiscal year 1898		$189 17
From gate receipts	$964 00	
From hay sold	21 10	
From rent of privileges	574 51	
From grand-stand tickets sold	413 70	
From annual members, $1 each	2,001 00	
From members, $5 each	300 00	
From entries for races (horse)	270 00	
From advertising	60 00	
From sundry cash, not in above	32 28	
From State	1,380 16	
Receipts for 1899		6,016 75
Total receipts		$6,205 92

DISBURSEMENTS.

For permanent improvements		$171 76	
For attractions, $323; rent of telephone, $5; tents, $115; total		443 00	
For printing, $530.59; bands, $145; advertising, $57.50; race starter, $27.50; total		760 59	
For miscellaneous		380 01	
For salaries: Secretary, $50; treasurer, $40; office assistants, $84; police, $58; judges, $70.50; superintendent, $105.83; helpers, etc., $321.62; total,		729 95	
For race purses (horses)		1,215 00	
For premiums on horses	$328 00		
For premiums on cattle	544 00		
For premiums on sheep	279 00		
For premiums on swine	195 00		
For premiums on poultry	126 75		
For premiums on farm produce	61 50		
For premiums on dairy products	48 50		
For premiums on domestic	197 25		
For premiums on flowers	42 25		
For premiums on fruits	64 50		
For premiums on miscellaneous	176 90		
Total premiums		2,063 65	
Total disbursements			$5,763 96
Balance (credit)			$441 96

C. E. Seaman ..... President.
W. B. Georgia ..... Treasurer.

ULSTER.

RECEIPTS.

Balance on hand at close of fiscal year 1898.....		$101 71
From gate receipts	$1,199 63	
From rent of grounds, grand-stand receipts	135 95	
From rent of privileges	145 00	
From annual members	144 00	
From entries for races (horse).....	76 25	
From note given	750 00	
From State	1,706 97	
Receipts for 1899		4,157 80
Total receipts		$4,259 51

DISBURSEMENTS.

For payment of bonds, notes or other obligations	$600 00	
For permanent improvements	183 69	
For labor	160 39	
For material	239 42	
For miscellaneous	498 70	
For advertising and printing.....	197 01	
For rent of grounds	175 00	
For salaries: Secretary, $100; treasurer, $50; office assistants, $49.50; police, $3; judges, $49.20; superintendent, $25; total.....	276 70	
For race purses (horses).....	378 75	
For premiums on horses ...	$223 00	
For premiums on cattle ...	365 55	
For premiums on sheep ...	7 20	
For premiums on swine	8 10	

For premiums on poultry...	$151 30	
For premiums on farm produce	183 15	
For premiums on dairy products	18 50	
For premiums on domestic..	61 00	
For premiums on implements and machines	65 50	
For premiums on flowers ..	41 25	
For premiums on fruits ...	112 00	
For premiums on miscellaneous	203 26	
Total premiums		$1,439 81
Total disbursements		$4,149 47
Balance (credit)		$110 04

W. Kelly Shook ..... President.
Frank B. Hornbeek ..... Treasurer.

WASHINGTON.

RECEIPTS.

Balance on hand at close of fiscal year 1898		$1,652 72
From gate receipts	$5,496 95	
From rent of privileges	1,847 00	
From entries for premiums	175 00	
From annual members	207 00	
From entries for races (horse)	1,800 00	
From miscellaneous	76 08	

From donations	$15 00	
From State	2,973 03	
Receipts for 1899		$12,590 06
Total receipts		$14,242 78

DISBURSEMENTS.

For payment of bonds, notes or other obligations		$1,420 00
For permanent improvements		687 35
For tax and insurance		312 33
For labor		227 08
For material		571 15
For attractions and music		525 00
For printing and advertising		919 05
For hay and straw		368 69
For salaries: Secretary, $300; treasurer, $150; office assistants, $121.05; police, $280; judges, $125.85; superintendent, $247; helpers, etc., $175; total		1,398 90
For race purses (horses)		3,775 00
For miscellaneous		183 53
For premiums on horses	$553 00	
For premiums on cattle	1,102 50	
For premiums on sheep	197 00	
For premiums on swine	303 00	
For premiums on poultry	357 50	
For premiums on farm produce	307 75	
For premiums on dairy products	35 50	
For premiums on domestic	703 50	

For premiums on implements and machines	$117 00	
For premiums on flowers	108 45	
For premiums on fruits	56 50	
For premiums on miscellaneous	13 00	
Total premiums		$3,854 70
Total disbursements.		$14,242 78

Judson Edie ..... President.
W. Irving Bristol ..... Treasurer.

WAYNE.

RECEIPTS.

Balance on hand at close of fiscal year 1898		$723 00
From gate receipts	$1,215 85	
From rent of privileges	200 00	
From annual members	328 00	
From entries for races (horse)	143 75	
From donations	59 50	
From bonds issued, notes given or any other obligation	549 88	
From State	1,742 45	
Receipts for 1899		4,239 43
Total receipts		$4,962 43

DISBURSEMENTS.

For unpaid premiums, 1898	$6 00
For permanent improvements	2,500 00
For labor	200 00

For entertainment of Governor, etc. . .		$195 50	
For supplies (hay, grain, printing, etc.),		403 10	
For interest		51 00	
For salaries		80 00	
For race purses (horses)		320 00	
For premiums on horses	$144 00		
For premiums on cattle	138 00		
For premiums on sheep	162 75		
For premiums on swine	114 25		
For premiums on poultry . . .	62 25		
For premiums on farm produce	48 87		
For premiums on dairy products	2 00		
For premiums on domestic . .	110 12		
For premiums on implements and machines	11 50		
For premiums on flowers . .	17 74		
For premiums on fruits	79 30		
For premiums on miscellaneous	338 37		
Total premiums		1,229 15	
Total disbursements			$4,984 75
Balance (debit)			$22 32

E. W. Weeks . . . . . President.
E. D. Leonard . . . . . Treasurer.

WESTCHESTER.

WESTCHESTER — SOCIETY OF AGRICULTURE AND HORTICULTURE OF WESTCHESTER.

RECEIPTS.

Balance on hand at close of fiscal year 1898		$817 64
From gate receipts	$5,440 20	
From rent of grounds	400 00	
From rent of privileges	2,025 95	
From entries for races (horse)	1,045 00	
From bonds issued, notes given or any other obligation	500 00	
From State	4,635 98	
Receipts for 1899		14,047 13
Total receipts		$14,864 77

DISBURSEMENTS.

For payment of bonds, notes or other obligations	$1,796 37
For special attractions before grandstand, and music	925 00
For permanent improvements	400 00
For dividends declared and earned in fiscal year 1898	500 00
For labor	3,218 29
For material	284 95
For salaries: Secretary, $500; treasurer, $100; office assistants, $108; police, $416; judges, $172.91; superintendent, $500; helpers, etc., $296.70; total	2,094 61

For race purses (horses)		$2,500 00	
For premiums on horses	$423 00		
For premiums on cattle	304 50		
For premiums on sheep	154 00		
For premiums on swine	120 00		
For premiums on poultry	368 00		
For premiums on farm produce	768 00		
For premiums on dairy products	202 30		
For premiums on domestic	853 65		
For premiums on flowers	123 25		
For premiums on fruits	312 25		
Total premiums		3,628 95	
Total disbursements			$15,348 17
Balance (debit)			$483 40

James Hopkins . . . . . President.
Joseph B. See . . . . . Treasurer.

WYOMING.

RECEIPTS.

Balance on hand at close of fiscal year 1898		$6 12
From gate receipts	$704 25	
From rent of grounds	40 50	
From rent of privileges	94 50	
From annual members	215 00	
From advertising and score cards	44 45	
From entries for races (horse)	307 50	

From grand-stand	$116 90	
From State	1,445 14	
Receipts for 1899		$2,968 24
Total receipts		$2,974 36

DISBURSEMENTS.

For payment of bonds, notes or other obligations		$280 00
For hay and fodder		66 55
For State Association		28 90
For special attractions		38 50
For labor		242 78
For material		173 64
For rent of tents		70 05
For band		60 00
For telephone, telegraph and postage		18 14
For salaries: Secretary, $75; office assistants, $24.80; miscellaneous, $60.12; judges, $39; helpers, etc., $29.50; total		228 42
For race purses (horses)		780 00
For printing, etc.		133 05
For premiums on horses	$148 00	
For premiums on cattle	314 00	
For premiums on sheep	187 00	
For premiums on swine	67 00	
For premiums on poultry	15 00	
For premiums on farm produce	36 00	
For premiums on dairy products	11 00	
For premiums on domestic	48 25	
For premiums on flowers	13 75	

For premiums on fruits....	$23 50	
For premiums on miscellaneous	1 25	
Total premiums	$864 75	
Total disbursements		$2,984 78
Balance (debit)		$10 42

E. T. Montgomery . . . . . President.
John Underhill . . . . . Treasurer.

YATES.

RECEIPTS.

Balance on hand at close of fiscal year 1898.....		$157 46
From gate receipts	$522 33	
From rent of grounds	91 31	
From rent of privileges	112 50	
From annual members	331 00	
From entries for races (horse)	155 00	
From advertising	66 00	
From donations	242 12	
From bonds issued, notes given or any other obligation	50 00	
From State	1,524 36	
Receipts for 1899		$3,094 92
Total receipts		$3,252 38

DISBURSEMENTS.

Balance due at close of fiscal year 1898,		$52 32
For payment of bonds, notes or other obligations		304 12
For printing		193 20
For permanent improvements		437 04
For insurance and revenue tax		38 75
For labor		93 71
For material, stock feed		57 94
For board during fair of officers and managers		24 80
For incidentals, postage, etc.		117 12
For band music and special features		84 00
For salaries: Secretary, $50; office assistants, $26.90; judges, $39.50; superintendent, $50; total		166 40
For race purses (horses)		522 50
For race purses (bicycle or other), including cost of prizes		25 00
For premiums on horses	$166 50	
For premiums on cattle	170 00	
For premiums on sheep	106 00	
For premiums on swine	30 00	
For premiums on poultry	148 27	
For premiums on farm produce	63 20	
For premiums on dairy products	91 50	
For premiums on domestic	74 45	
For premiums on implements and machines	41 25	
For premiums on flowers	35 65	
For premiums on fruits	166 70	

For premiums on miscellaneous	$10 25	
Total premiums	$1,103 77	
Total disbursements		$3,220 37
Balance (credit)		$32 01

Ira R. Brundage ..... President.
M. W. Renier ..... Treasurer.

TOWN AND OTHER SOCIETIES.

CUBA FAIR AND RACING ASSOCIATION.

RECEIPTS.

From gate receipts	$827 30	
From rent of privileges	242 85	
From entries for premiums	290 75	
From entries for races (horse)	132 00	
From entries for races (bicycle or other)	18 50	
From donations	75 00	
From bonds issued, notes given or any other obligation	800 00	
From State	1,356 71	
Total receipts		$3,743 11

DISBURSEMENTS.

Balance due at close of fiscal year 1898,	$169 46	
For payment of bonds, notes or other obligations	662 50	
For ground rent	200 00	
For labor	363 04	
For material	345 47	
For attractions and band	340 25	
For salaries: Secretary, $100; police, $20; judges, $28; superintendent, $15; total	163 00	
For race purses (horses)	360 00	
For race purses (bicycle or other) including cost of prizes	100 00	
For premiums on horses	$161 00	
For premiums on cattle	344 00	

For premiums on sheep . . .	$70 00	
For premiums on swine	57 00	
For premiums on poultry . .	109 50	
For premiums on dairy produce	34 75	
For premiums on dairy products	14 50	
For premiums on domestic . .	158 85	
For premiums on implements and machines	6 50	
For premiums on flowers . . .	31 50	
For premiums on fruits	38 00	
For premiums on miscellaneous	86 00	
Total premiums		$1,111 60
Total disbursements		$3,815 32
Balance (debit)		$72 21

George Amsden . . . . . President.
H. C. Morgan . . . . . Treasurer.

WELLSVILLE FAIR ASSOCIATION.

RECEIPTS.

From gate receipts	$3,947 45	
From rent of privileges	710 25	
From entries for premiums	141 10	
From entries for races (horse)	540 00	
From donations	530 25	
From sale of hay, straw	95 95	
Receipts for 1899		$5,965 00
Total receipts		$5,965 00

DISBURSEMENTS.

Balance due at close of fiscal year 1898,		$216 96	
For labor		212 79	
For material, advertising, etc.		600 79	
For special attractions		832 50	
For revenue stamps		4 00	
For salaries: Office assistants, $53; police, $117; judges, $95; superintendent, $12; helpers, etc., $80.87; total		357 87	
For race purses (horses)		2,245 00	
For premiums on horses	$115 00		
For premiums on cattle	244 00		
For premiums on sheep	154 00		
For premiums on swine	78 00		
For premiums on poultry	149 25		
For premiums on farm produce	76 50		
For premiums on dairy products	16 00		
For premiums on domestic	172 35		
For premiums on flowers	8 25		
For premiums on fruits	30 50		
Total premiums		1,043 85	
Total disbursements			$5,513 76
Balance (credit)			$451 24

D. C. Ackerman . . . . . President.
John McEwen . . . . . Treasurer.

BINGHAMTON INDUSTRIAL EXPOSITION.

RECEIPTS.

From gate receipts	$4,718 15	
From rent of privileges	439 25	
From entries for premiums	513 45	
From entries for races (horse)	640 00	
From advertising premium list	163 50	
From treasurer's advance	657 10	
From State	2,006 74	
Total receipts for 1899		$9,138 19
Total receipts		$9,138 19

DISBURSEMENTS.

For payment of notes, $1,472.10; U. S. Stevens, for advanced cash, $42.16; total	$1,514 00
For old bills	110 86
For return to eight directors of cash advanced	381 44
For labor	187 12
For material	211 19
For special attractions, music, rent of grounds	1,482 38
For advertising, $427.73; printing premium list, $144.80; tents, $115.25; total	687 78
For miscellaneous expenses	150 82
For salaries: Secretary, $400; office assistants, $159.90; police, $128.25; judges, $73; superintendent, $95.75; helpers, etc., $40.50; total	897 30
For race purses (horses)	1,500 00

For premiums on horses....	$196 00	
For premiums on cattle....	349 00	
For premiums on sheep....	76 00	
For premiums on swine....	69 00	
For premiums on poultry..	748 75	
For premiums on farm produce	50 75	
For premiums on dairy products	8 00	
For premiums on domestic..	275 75	
For premiums on flowers...	43 25	
For premiums on fruits ...	111 50	
Total premiums		$1,928 00
Total disbursements		$9,051 15
Balance (credit)		$87 04

J. E. Rogers ..... President.
U. S. Stevens ..... Treasurer.

FRANKLINVILLE AGRICULTURAL AND DRIVING PARK ASSOCIATION.

RECEIPTS.

Balance on hand at close of fiscal year 1898.....		$132 64
From gate receipts and grand-stand..	$1,461 41	
From rent of privileges	248 00	
From entries for premiums.....	408 00	
From entries for races (horse).....	115 00	

From bonds issued, notes given or any other obligation	$900 00	
From State	1,258 87	
Receipts for 1899		$4,391 28
Total receipts		$4,523 92

DISBURSEMENTS.

For payment of bonds, notes or other obligations	$1,635 97	
For note chg. up at bank	21 32	
For material	54 77	
For attractions	60 00	
For music	75 00	
For dues and taxes, $35.48; postage, $21.18; total	56 66	
For salaries: Secretary, $100; treasurer, $25; office assistants, $31.76; police, $27.63; judges, $64.63; superintendent, $200; helpers, etc., $172.84; total	621 86	
For race purses (horses)	693 76	
For advertising	249 69	
For premiums on horses	$112 00	
For premiums on cattle	243 00	
For premiums on sheep	139 00	
For premiums on swine	43 00	
For premiums on poultry	148 00	
For premiums on farm produce	40 75	
For premiums on dairy products	6 25	
For premiums on domestic	159 00	
For premiums on flowers	11 25	

For premiums on fruits ...	$9 25	
For premiums on miscellaneous ...	72 25	
Total premiums ...	$983 75	
Total disbursements ...		$4,452 78
Balance (credit) ...		$71 14

W. A. Day ... President.
L. S. Ely ... Treasurer.

AFTON DRIVING PARK AND AGRICULTURAL ASSOCIATION.

RECEIPTS.

From gate receipts ...	$1,921 37	
From rent of grounds ...	100 00	
From rent of privileges ...	320 13	
From entries for premiums ...	171 35	
From entries for races (horse) ...	307 00	
From grand-stand ...	263 74	
From State ...	1,573 21	
Receipts for 1899 ...		$4,656 81
Total receipts ...		$4,656 81

DISBURSEMENTS.

Balance due at close of fiscal year 1898,	$326 64	
For payment of bonds, notes or other obligations, interest ...	646 61	
For permanent improvements and material ...	620 74	
For office rent two years ...	24 00	

For labor		$68 49	
For printing, $135.40; postage, $19.62,		155 02	
For attractions		463 50	
For music		123 50	
For salaries: Secretary, $50; gate and police, $69.25; judges, $29.50; helpers, etc., $21.40; total		170 15	
For race purses (horse)		785 00	
For race purses (bicycle or other) including cost of prizes, incidentals		105 93	
For premiums on horses	$308 50		
For premiums on cattle	524 00		
For premiums on sheep	77 00		
For premiums on swine	63 00		
For premiums on poultry	108 75		
For premiums on farm produce	77 05		
For premiums on dairy products	20 00		
For premiums on domestic	319 05		
For premiums on implements and machines	31 50		
For premiums on flowers	54 00		
For premiums on fruits	26 30		
For premiums on miscellaneous	32 85		
Total premiums		1,642 00	
Total disbursements			$5,131 58
Balance (debit)			$474 78

Fred Church . . . . . President.
E. A. Goodsell . . . . . Treasurer.

RIVERSIDE.

RECEIPTS.

Balance on hand at close of fiscal year 1898.....		$1,138 81
From gate receipts	$1,713 40	
From grand-stand	193 10	
From rent of privileges	440 25	
From entries for premiums	28 00	
From advertising in premium list.....	73 18	
From insurance on barn burned	300 00	
From use of sprinklers, village of Greene	34 50	
From entries for races (horse)	212 50	
From feed and grain	17 29	
From State	1,508 40	
Receipts for 1899		4,520 62
Total receipts		$5,659 43

DISBURSEMENTS.

For payment of purchased stock	$51 17
For rent of Opera House, Farmers' Institute	12 00
For flowers at funeral of W. W. English	12 00
For permanent improvements	640 00
For U. S. revenue tax	8 48
For labor	247 33
For material	340 72
For special attractions, "balloon"...	125 00
For rebate Red Men excursion	31 30
For dues to National Trotting and State Association, and expenses of delegates	39 97
For insurance on buildings	91 00

For salaries: Secretary, $50; office assistants, $66; police, $127; judges, $80; heldpers, etc., $12; total.....		$335 00	
For race purses (horses)		640 00	
For premiums on horses	$182 00		
For premiums on cattle	352 00		
For premiums on sheep	99 00		
For premiums on swine	11 00		
For premiums on poultry ...	153 00		
For premiums on farm produce	47 25		
For premiums on dairy products	100 00		
For premiums on domestic ..	230 85		
For premiums on implements and machines	41 75		
For premiums on flowers ..	22 95		
For premiums on fruits	24 20		
Total premiums		1,264 20	
Total disbursements			$3,837 97
Balance (credit)			$1,821 46

Curtis Winston ..... President.
Joseph E. Juliand ..... Treasurer.

COLUMBIA AGRICULTURAL AND HORTICULTURAL ASSOCIATION.

RECEIPTS.

Balance on hand at close of fiscal year 1898.....			$55 93
From gate receipts	$2,919 45		
From rent of privileges	704 00		

From entries for premiums	$216 40	
From entries for races (horse)	515 00	
From stall and feed fees (racing, etc.)	131 15	
From donations	71 35	
From State	1,505 32	
Receipts for 1899		$6,062 67
Total receipts		$6,118 60

DISBURSEMENTS.

For payment of notes, bonds or other obligations	$55 93	
For advertising and printing	441 94	
For music	187 00	
For special attractions	385 00	
For miscellaneous expenses	714 22	
For salaries: Secretary, $100; treasurer, $25; office assistants, $89; police, $111.50; judges, $12.50; superintendent, $25; helpers, etc., $195.50; total	558 50	
For race purses (horses)	1,435 00	
For premiums on horses	$235 00	
For premiums on cattle	103 00	
For premiums on sheep	251 00	
For premiums on swine	83 00	
For premiums on poultry	157 25	
For premiums on farm produce	92 00	
For premiums on domestic	68 00	
For premiums on implements and machines	12 00	
For premiums on fruits	88 00	

For premiums on miscellaneous	$251 75	
Total premiums	$1,341 00	
Total disbursements		$5,118 59
Balance (credit)		$1,000 01

Delbert Dinehart ..... President.
Fred S. Hallenbeck ..... Treasurer.

CATSKILL MOUNTAIN.

RECEIPTS.

Balance on hand at close of fiscal year 1898		$152 79
From gate receipts	$1,271 85	
From rent of grounds	60 00	
From rent of privileges	398 50	
From entries for premiums	297 50	
From entries for races (horse)	107 50	
From notes given	49 50	
From State	1,059 81	
Receipts for 1899		3,244 66
Total receipts		$3,387 45

DISBURSEMENTS.

For payment on land contract	$124 80
For taxes	33 10
For permanent improvements	255 61
For dividends	161 40
For labor	165 56
For material	72 34

For insurance		$10 00	
For payment of note		50 00	
For advertising and printing		200 40	
For salaries: Secretary, $50; treasurer, $50; police, $32.25; judges, $97.14; superintendent, $50; helpers, etc., $84.70; total		364 09	
For race purses (horses)		836 24	
For amusements		237 50	
For premiums on horses	$41 00		
For premiums on cattle	238 00		
For premiums on sheep	36 00		
For premiums on swine	32 00		
For premiums on poultry	101 32		
For premiums on farm produce	84 43		
For premiums on dairy products	17 50		
For premiums on domestic	68 24		
For premiums on flowers	35 03		
For premiums on fruits	37 65		
For premiums on miscellaneous	186 02		
Total premiums		877 19	
Total disbursements			$3,388 23
Balance (credit)			$9 22

Thomas Winter . . . . . President.
J. H. Hitt . . . . . Treasurer.

DELAWARE VALLEY.

RECEIPTS.

From gate receipts	$1,401 50	
From rent of grounds	40 00	
From rent of privileges	555 51	
From entries for premiums	282 00	
From annual members	475 00	
From bonds issued, notes given or any obligation	450 00	
From State	2,810 24	
Receipts for 1899		$5,514 25
Total receipts		$5,514 25

DISBURSEMENTS.

Association in debt, Dec. 1, 1898	$4,500 00	
For payment of bonds, notes or other obligations	1,392 57	
For permanent improvements	125 00	
For labor	25 00	
For material	150 00	
For salaries	385 00	
For premiums on horses	$389 12	
For premiums on cattle	513 37	
For premiums on sheep	193 88	
For premiums on swine	117 50	
For premiums on poultry	214 06	
For premiums on farm produce	488 50	
For premiums on dairy products	14 50	
For premiums on domestic	411 45	

For premiums on implements and machines	$85 90	
For premiums on flowers	46 55	
For premiums on fruits	131 07	
For premiums on miscellaneous	185 78	
Total premiums		$2,786 68
Total disbursements		$9,364 25
Balance (debit)		$3,850 00

A. F. Reynolds ..... President.
W. A. Shepard ..... Treasurer.

SHAVERTOWN.

RECEIPTS.

From gate receipts	$810 25	
From rent of privileges	203 50	
From entries for premiums	104 00	
From entries for races (horse)	26 80	
From donations	11 25	
Receipts for 1899		$1,155 80
Total receipts		$1,155 80

DISBURSEMENTS.

For debt	$32 40
For rent of grounds	50 00
For permanent improvements	75 00
For music and attractions	98 75
For labor	15 25

For material		$12 35	
For miscellaneous		75 00	
For salaries: Police, $14.75; judges, $19.25; helpers, etc., $3.75; total		37 75	
For race purses (horses)		96 00	
For premiums on horses	$121 00		
For premiums on cattle	167 25		
For premiums on sheep	34 50		
For premiums on swine	14 50		
For premiums on poultry	113 90		
For premiums on farm produce	77 50		
For premiums on dairy products	10 00		
For premiums on flowers	23 25		
For premiums on fruits	39 20		
For premiums on miscellaneous	62 75		
Total premiums		663 85	
Total disbursements			$1,156 35
Balance (debit)			$0 55

P. H. Shafer ..... President.
James Bramley ..... Treasurer.

CAPE VINCENT.

RECEIPTS.

Balance on hand at close of fiscal year 1898		$385 56
From gate receipts	$953 65	
From rent of grounds	36 50	

From rent of privileges	$161 75	
From entries for premiums	113 51	
From entries for races (horse)	77 50	
From grand-stand	72 52	
From State	993 33	
From refunded premium	50	
From advertising in premium list	190 50	
Receipts for 1899		$2,599 76
Total receipts		$2,985 32

DISBURSEMENTS.

For payment of bonds, notes or other obligations	$42 00	
For music	64 00	
For permanent improvements	65 00	
For labor	107 07	
For printing	145 25	
For supplies	102 60	
For attractions	326 55	
For salaries: Secretary, $50; treasurer, $50; office assistants, $12; police, $47; total	159 00	
For race purses (horses)	606 25	
For premiums on horses	$106 50	
For premiums on cattle	136 50	
For premiums on sheep	45 25	
For premiums on swine	42 00	
For premiums on poultry	19 84	
For premiums on farm produce	56 24	
For premiums on dairy products	22 75	
For premiums on domestic	93 11	
For premiums on flowers	11 75	

For premiums on fruits	$28 26	
For premiums on miscellaneous	46 37	
Total premiums	$608 57	
Total disbursements		$2,226 29
Balance (credit)		$759 03

Philetus S. Judd .... President.
Chas. B. Wood .... Treasurer.

HEMLOCK LAKE UNION.

RECEIPTS.

Balance on hand at close of fiscal year 1898....		$1,221 57
From gate receipts	$710 00	
From rent of grounds....	29 60	
From rent of privileges....	362 85	
From annual members	991 00	
From entries for races (horse)....	162 50	
From entries for races (bicycle or other)	12 50	
From bonds issued, notes given or any other obligation	28 12	
From State	1,452 21	
Receipts for 1899		3,748 78
Total receipts		$4,970 35

DISBURSEMENTS.

Balance due at close of fiscal year 1898,	$34 86
For dinner, officers of society....	80 00
For rent of grounds	132 00
For permanent improvements	136 64
For dividends, insurance and bond....	115 13

For labor		$129 14	
For material		109 53	
For printing and special tax		105 00	
For expense delegates to Albany and dues		35 25	
For special attraction, "Indians"		150 00	
For salaries: Secretary, $35; treasurer, $35; police, $86.50; judges, $58; superintendent, $54; helpers, etc., $7.50; total		276 00	
For race purses (horses)		560 50	
For race purses (bicycle or other), including cost of prizes		40 00	
For premiums on horses	$196 00		
For premiums on cattle	137 00		
For premiums on sheep	97 00		
For premiums on swine	20 00		
For premiums on poultry	60 60		
For premiums on farm produce	32 00		
For premiums on domestic	198 10		
For premiums on implements and machines	4 00		
For premiums on fruits	12 75		
For premiums on miscellaneous	13 00		
Total premiums		770 45	
Total disbursements			$2,684 50
Balance (credit)			$2,285 35

Fred A. Wicker ..... President.
Willis Adams ..... Treasurer.

BROCKPORT UNION.

RECEIPTS.

Balance on hand at close of fiscal year 1898		$542 53
From gate receipts	$1,899 75	
From rent of grounds	14 00	
From rent of privileges	446 25	
From grand-stand receipts	237 05	
From advertising	15 00	
From sale of hay and pasturage	71 50	
From entries for races (horse)	407 50	
From donations	14 55	
From State	2,155 50	
Receipts for 1899		5,261 10
Total receipts		$5,803 63

DISBURSEMENTS.

For permanent improvements	$327 65	
For repairs	523 90	
For advertising, $67.22; insurance, $60	127 22	
For postage, internal revenue, etc.	85 00	
For general expenses	409 32	
For attractions	446 00	
For hay and straw, $121; printing and stationery, $80.75	201 75	
For salaries: Secretary, $100; treasurer, $25; office assistants, $50; police, $135.58; judges, $123.45; helpers, etc., $62; total	496 03	
For race purses (horses)	955 00	
For premiums on horses	$341 00	
For premiums on cattle	270 00	
For premiums on sheep	188 00	

For premiums on swine	$151 00	
For premiums on poultry....	225 50	
For premiums on farm produce.	57 00	
For premiums on domestic..	332 55	
For premiums on flowers...	24 50	
For premiums on fruits.....	119 25	
For premiums on miscellaneous	24 50	
Total premiums	$1,733 30	
Total disbursements		$5,305 17
Balance (credit)		$498 46

E. Garrison . . . . . President.
R. C. Hull . . . . . Treasurer.

BOONVILLE FAIR ASSOCIATION.

RECEIPTS.

From gate receipts	$1,918 53	
From rent of grounds	67 00	
From rent of privileges.....	337 00	
From advertising	56 50	
From bonds issued, notes given or any other obligations	200 00	
From State	1,189 19	
Total receipts		$3,768 22

DISBURSEMENTS.

Balance due at close of fiscal year 1898	$7 41
For payment of bonds, notes or other obligations	689 14

For labor		$32 00	
For material		20 42	
For license, $8.34; rent, $341.00		349 34	
For entertainments, bands, etc		644 65	
For advertising, $214.50; hay, $37.56,		252 06	
For salaries: Secretary, $75; treasurer, $25; office assistants, $25; police, $73.25; judges, $33.20; superintendent, $20; president, $50; total		301 45	
For race purses (horses)		478 00	
For miscellaneous		90 67	
For premiums on horses	$75 00		
For premiums on cattle	290 00		
For premiums on sheep	22 00		
For premiums on swine	27 00		
For premiums on poultry	27 50		
For premiums on farm produce	39 25		
For premiums on dairy products	14 00		
For premiums on domestic	226 75		
For premiums on flowers	43 50		
For premiums on fruits	15 75		
For premiums on miscellaneous	58 25		
Total premiums		839 00	
Total disbursements			$3,684 14
Balance (credit)			$64 08

Benjamin A. Capron ..... President.
E. G. Palmer ..... Treasurer.

PHŒNIX UNION.

RECEIPTS.

Balance on hand at close of fiscal year 1898		$428 23
From gate receipts	$1,058 55	
From rent of privileges	275 00	
From annual members	290 00	
From entries for races (horse)	108 75	
For advertising in premium list	70 00	
From rent of tents, etc.	18 50	
From State	977 03	
Receipts for 1899		2,797 83
Total receipts		$3,226 06

DISBURSEMENTS.

For bands of music	$85 00	
For insurance, $12; special tax, $8.34; total	20 34	
For permanent improvements	168 33	
For advertising, $62.60; rent of grounds, $125; total	187 60	
For labor	90 08	
For material	478 33	
For salaries: Secretary, $50; treasurer, $15; office assistants, $11.50; police, $39.50; judges, $29.75; superintendent, $110.55; total	256 30	
For race purses (horses)	446 25	
For ball games	75 00	
For premiums on horses	$183 00	
For premiums on cattle	162 00	
For premiums on sheep	45 00	

For premiums on swine	$65 25	
For premiums on poultry ...	22 75	
For premiums on farm produce	52 00	
For premiums on dairy products	1 00	
For premiums on domestic ..	71 00	
For premiums on implements and machines	29 25	
For premiums on flowers ...	45 50	
For premiums on fruits	54 25	
For premiums on miscellaneous	4 00	
Total premiums		$735 00
Total disbursements		$2,548 18
Balance (credit)		$677 88

John O'Brien . . .. President.
N. A. Hughes ..... Treasurer.

GORHAM.

RECEIPTS.

Balance on hand at close of fiscal year 1898.....		$768 74
From gate receipts	$532 30	
From rent of privileges	62 50	
From entries for premiums	3 37	
From annual members	207 00	
From entries for races (horse)	26 00	
From donations	25 00	

From advertisements in premium list.	$108 50	
From State	992 32	
Receipts for 1899		$1,932 24
Total receipts		$2,700 98

DISBURSEMENTS.

Balance due at close of fiscal year 1898,	$26 26	
For payment of bonds, notes or other obligations	34 50	
For permanent improvements	612 00	
For labor	184 17	
For material	287 00	
For salaries: Secretary, $20; treasurer, $20.50; office assistants, $24.23; police, $4.50; judges, $27.75; superintendent, $22.50; helpers, etc., $44.50; total	163 98	
For race purses (horses)	149 00	
For race purses (bicycle or other), including cost of prizes	13 00	
For premiums on horses	$220 50	
For premiums on cattle	88 00	
For premiums on sheep	120 00	
For premiums on swine	16 00	
For premiums on poultry . . .	60 75	
For premiums on farm produce	33 65	
For premiums on dairy products	6 75	
For premiums on domestic . .	143 20	
For premiums on implements and machines	17 00	
For premiums on flowers . .	6 25	

For premiums on fruits	$45 95	
For premiums on miscellaneous	6 00	
Total premiums	764 05	
Total disbursements		$2,233 96
Balance (credit)		$467 02

William Snyder .... President.
G. M. Powell .... Treasurer.

NAPLES UNION.

RECEIPTS.

Balance on hand at close of fiscal year 1898....		$1,120 77
From gate receipts	$665 75	
From rent of privileges	46 85	
From annual members	180 00	
From entries for races (bicycle or other),	11 00	
From advertising	74 00	
From State	986 74	
Receipts for 1899		1,953 34
Total receipts		$3,085 11

DISBURSEMENTS.

For permanent improvements	$200 00
For postage, etc.	4 53
For labor	135 96
For material	106 61
For advertising	111 25

For rent of grounds		$135 00	
For sundry expenses		241 27	
For salaries: Secretary, $40; police, $7; total		47 00	
For race purses (horses)		223 75	
For race purses (bicycle or other), including cost of prizes		28 00	
For premiums on horses	$118 00		
For premiums on cattle	126 00		
For premiums on sheep	122 25		
For premiums on swine	18 00		
For premiums on poultry	67 00		
For premiums on farm produce	143 75		
For premiums on dairy products	8 25		
For premiums on domestic	112 75		
For premiums on implements and machines	12 50		
For premiums on flowers	18 00		
For premiums on fruits	57 00		
For premiums on miscellaneous	44 25		
Total premiums		847 75	
Total disbursements			$2,081 12
Balance (credit)			$1,003 99

John Bolles . . . . . President.
D. J. Doughty . . . . . Treasurer.

SANDY CREEK, RICHLAND, ORWELL AND BOYLSTON.

RECEIPTS.

Balance on hand at close of fiscal year 1898		$1,164 72
From gate receipts	$734 75	
From rent of privileges	501 50	
From annual members	1,570 00	
From entries for races (horse)	249 00	
From grand-stand	314 60	
From State	1,650 19	
Receipts for 1899		5,020 04
Total receipts		$6,184 76

DISBURSEMENTS.

For advertising and printing	$315 82	
For permanent improvements	538 41	
For insurance on buildings	26 50	
For labor	164 54	
For material	128 86	
For music and attraction	449 62	
For 5 per cent. race entries on Treasurer's hands	122 00	
For salaries: Secretary, $75; treasurer, $6; office assistants, $62; police, $52; judges, $77.09; superintendent, $132.05; total	404 14	
For race purses (horses)	457 50	
Miscellaneous disbursements	52 20	
For premiums on horses	$219 00	
For premiums on cattle	530 00	
For premiums on sheep	84 75	

For premiums on swine	$147 25	
For premiums on poultry ...	64 85	
For premiums on farm produce	82 00	
For premiums on dairy products	23 00	
For premiums on domestic ..	315 50	
For premiums on implements and machines	37 75	
For premiums on flowers ...	60 00	
For premiums on fruits	25 75	
For premiums on miscellaneous	47 50	
Total premiums		$1,037 35
Total disbursements		$4,296 94
Balance (credit)		$1,887 82

John R. Allen ..... President.
George T. Smith ..... Treasurer.

MORRIS FAIR ASSOCIATION.

RECEIPTS.

Balance on hand at close of fiscal year 1898.....		$1,593 39
From gate receipts	$2,891 17	
From hay and pasturing.....	24 00	
From rent of privileges.....	398 25	

From entries for races (horse)	$76 00	
From State	2,243 29	
Receipts for 1899		$5,632 71
Total receipts		$7,226 10

DISBURSEMENTS.

For taxes, $15.15; insurance, $8.34; total	$23 49	
For music	150 00	
For printing, $111.75; attractions, $248.50; total	360 25	
For permanent improvements	98 72	
For dividends	353 00	
For labor	238 94	
For material	188 07	
For salaries: Secretary, $50; treasurer, $50; office assistants, $24; police, $46; judges, $51.68; superintendent, $156.50; helpers, etc., $32.87; total	411 05	
For race purses (horses)	287 10	
For race purses (bicycle or other) including cost of prizes	12 10	
For premiums on horses	$166 10	
For premiums on cattle	520 85	
For premiums on sheep	171 05	
For premiums on swine	174 90	
For premiums on poultry	174 34	
For premiums on farm produce	338 22	
For premiums on dairy products	21 45	
For premiums on domestic	501 21	

For premiums on implements and machines	$33 87	
For premiums on flowers	72 04	
For premiums on fruits	38 76	
For premiums on miscellaneous	76 08	
Total premiums		$2,288 87
Total disbursements		$4,411 59
Balance (credit)		$2,814 51

Charles A. Brown ..... President.
D. I. Laurence ..... Treasurer.

ONEONTA UNION.

RECEIPTS.

Balance on hand at close of fiscal year 1898		$623 41
From gate receipts	$3,849 10	
From rent of grounds	64 07	
From rent of privileges	644 50	
From entries for premiums	748 07	
From advertisements	446 50	
From entries for races (horse)	578 00	
From State	2,297 72	
Receipts for 1899		8,627 96
Total receipts		$9,251 37

DISBURSEMENTS.

For permanent improvements	$1,122 80	
For miscellaneous bills	1,236 61	
For labor	350 70	

For material		$425 23	
For legal fees		110 28	
For advertising		873 33	
For straw, hay and grain		70 00	
For salaries: Secretary, $100; treasurer, $25; office assistants, $24; police, $79.25; judges, $50.45; superintendent, $31; helpers, etc., $55.50; total		365 20	
For race purses (horses)		1,292 00	
For premiums on horses	$301 25		
For premiums on cattle	885 75		
For premiums on sheep	71 25		
For premiums on swine	30 00		
For premiums on poultry	266 25		
For premiums on farm produce	268 25		
For premiums on dairy products	63 00		
For premiums on domestic	761 49		
For premiums on implements and machines	60 50		
For premiums on flowers	346 00		
For premiums on fruits	135 37		
For premiums on miscellaneous	118 43		
Total premiums		3,307 54	
Total disbursements			$9,153 69
Balance (credit)			$97 68

W. L. Brown ..... President.
H. M. Bard ..... Treasurer.

RICHFIELD SPRINGS.

RECEIPTS.

Balance on hand at close of fiscal year 1898.....		$1,171 40
From gate receipts	$858 95	
From rent of grounds	30 00	
From rent of privileges.....	298 00	
From annual members	172 00	
From entries for races (horse).....	105 00	
From State	1,203 77	
Receipts for 1899		2,667 72
Total receipts		$3,839 12

DISBURSEMENTS.

For permanent improvements	$94 50	
For labor	194 25	
For merchandise	366 27	
For attractions	385 00	
For rent	250 00	
For salaries: Secretary, $40; treasurer, $25; office assistants, $51; police, $38.25; judges, $19.55; total,	173 80	
For race purses (horses).....	458 00	
For premiums on horses....	$91 00	
For premiums on cattle.....	197 00	
For premiums on sheep.....	73 00	
For premiums on swine....	49 00	
For premiums on poultry...	45 50	
For premiums on farm produce	47 50	
For premiums on dairy products	25 75	
For premiums on domestic..	220 75	
For premiums on flowers....	28 25	

For premium on fruits.....	$29 25	
For premiums on miscellaneous.....	144 35	
Total premiums.....	$951 35	
Total disbursements.....		$2,873 17
Balance (credit).....		$965 95

M. O. Town ..... President.
Geo. T. Brockway ..... Treasurer.

SCHENEVUS VALLEY.

RECEIPTS.

Balance on hand at close of fiscal year 1898.....		$236 51
From gate receipts.....	$589 56	
From rent of privileges.....	155 89	
From entries for premiums.....	12 38	
From annual members.....	64 00	
From life members.....	10 50	
From entries for races (horse).....	142 50	
From rent of tent.....	5 00	
From State.....	973 33	
Receipts for 1899.....		1,953 16
Total receipts.....		$2,189 67

DISBURSEMENTS.

For revenue license.....	$8 44	
For payment of bonds, notes or other obligations.....	3 00	
For advertising.....	63 83	
For permanent improvements.....	50 00	
For miscellaneous, including postage, etc.....	56 41	

For labor		$80 25	
For material		22 88	
For music and attractions		210 00	
For rent of ground		100 00	
For forage and stabling		15 00	
For salaries Secretary, $25; treasurer, $6; office assistants, $23; police, $7.50; judges, $23.25; superintendent, $26; helpers, etc., $9.75; total		120 50	
For race purses (horses)		382 50	
For premiums on horses	$80 00		
For premiums on cattle	196 25		
For premiums on sheep	59 00		
For premiums on swine	5 00		
For premiums on poultry	74 00		
For premiums on farm produce	63 15		
For premiums on dairy products	4 50		
For premiums on domestic	175 25		
For premiums on implements and machines	2 50		
For premiums on flowers	3 75		
For premiums on fruits	6 00		
For premiums on miscellaneous	4 50		
Total premiums		673 90	
Total disbursements			$1,786 71
Balance (credit)			$402 96

Geo. E. Guy ..... President.
E. J. Goddard ..... Treasurer.

ROCKLAND COUNTY INDUSTRIAL ASSOCIATION.

RECEIPTS.

Balance on hand at close of fiscal year 1898.....		$1 13
From gate receipts	$410 70	
From rent of privileges	63 50	
From advertising in premium book...	119 42	
From annual members	245 00	
From entries for races (horse).....	287 50	
From notes given or any other obligation	1,182 45	
From State	1,005 39	
Receipts for 1899		3,313 96
Total receipts		$3,315 09

DISBURSEMENTS.

For payment of notes or other obligations	$1,267 66	
For labor	213 73	
For material	211 09	
For Reed String and Brass Band....	60 00	
For internal revenue license.....	7 50	
For advertising	12 75	
For salaries: Office assistants, $10.50; helpers, etc., $39.16; total	49 66	
For race purses (horses)	835 00	
For race purses (bicycle or other), including cost of prizes.....	53 25	
For premiums on horses ...	$105 00	
For premiums on cattle ...	137 00	
For premiums on sheep ...	3 00	
For premiums on swine ...	23 00	
For premiums on poultry ..	23 75	
For premiums on farm produce	86 25	

For premiums on domestic . .	$147 20	
For premiums on flowers . .	45 25	
For premiums on fruits . . .	30 50	
For premiums on miscellaneous	3 50	
Total premiums	$604 45	
Total disbursements		$3,315 09

Jacob E. Vanderbilt . . . . . President.
Marsh S. Cropsey . . . . . Treasurer.

GOUVERNEUR AGRICULTURAL AND MECHANICAL SOCIETY.

RECEIPTS.

Balance on hand at close of fiscal year 1898		$10 48
From gate receipts	$2,976 60	
From rent of grounds	133 50	
From rent of privileges	591 00	
From life members	210 00	
From entries for races (horse)	607 00	
From donations	5 00	
Borrowed	82 00	
From note	70 00	
From State	1,464 86	
Receipts for 1899		6,139 96
Total receipts		$6,150 44

DISBURSEMENTS.

For payment of principal, $570; interest, $290.05; total	$860 05	
For permanent improvements	165 43	

For labor		$288 86
For material		539 20
For special attractions and music		700 00
For sundry items (telegraph, telephone, express, etc.)		97 99
For salaries: Secretary, $125; treasurer, $50; office assistants, $49.50; police, $131.50; judges, $72.10; superintendent, $50; helpers, etc., $80.75; total		558 85
For race purses (horses)		1,475 00
For premiums on horses	$116 00	
For premiums on cattle	358 00	
For premiums on sheep	94 00	
For premiums on swine	66 00	
For premiums on poultry	140 00	
For premiums on farm produce	55 75	
For premiums on dairy products	73 92	
For premiums on domestic	119 75	
For premiums on flowers	25 25	
For premiums on fruits	10 00	
For premiums on miscellaneous	33 50	
Total premiums		1,092 17
Total disbursements		$5,777 55
Balance (credit)		$372 89

Charles Fuller . . . . . President.
T. J. Whitney . . . . . Treasurer.

OSWEGATCHIE AGRICULTURAL SOCIETY.

RECEIPTS.

Balance on hand at close of fiscal year 1898		$134 70
From gate receipts	$2,689 35	
From rent of privileges	555 75	
From entries for premiums	150 25	
From rebate for railroad tickets	74 50	
From entries for races (horse)	585 35	
From entries for races (bicycle or other),	5 00	
From donations	478 50	
Receipts for 1899		4,488 70
Total receipts		$4,623 46

DISBURSEMENTS.

For salaries: Secretary, $100; treasurer, $25; office assistants, $25; police, $119.92; judges, $76.75; superintendent, $50; helpers, etc., $1,199.28; total	$1,595 95	
For race purses (horses	1,774 45	
For race purses (bicycle or other) including cost of prizes	50 00	
For premiums on horses	$175 00	
For premiums on cattle	660 00	
For premiums on sheep	55 00	
For premiums on swine	14 00	
For premiums on poultry	109 00	
For premiums on farm produce	124 00	
For premiums on dairy products	70 00	

For premiums on domestic..	$178 50	
For premiums on implements and machines	82 00	
For premiums on flowers	16 50	
For premiums on fruits	37 50	
For premiums on miscellaneous	95 50	
Total premiums		$1,617 00
Total disbursements		$5,042 40
Balance (debit)		$419 00

James E. Kelly ..... President.
C. M. McClair ..... Treasurer.

RAQUETTE VALLEY AND ST. REGIS VALLEY AGRICULTURAL AND HORTICULTURAL SOCIETY.

RECEIPTS.

Balance on hand at close of fiscal year 1898		$15 00
From gate receipts	$2,223 60	
From rent of grounds	25 00	
From rent of privileges	591 50	
From entries for premiums	239 75	
From annual members	644 00	
From entries for races (horse)	714 00	
From bonds issued, notes given or any other obligation	1,515 00	

From State	$1,749 89	
From miscellaneous sources	438 64	
Receipts for 1899		$8,141 38
Total Receipts		$8,156 38

DISBURSEMENTS.

Balance due at close of fiscal year 1898,		$351 92
For payment of bonds, notes or other obligations		860 00
For labor		257 44
For miscellaneous, as special transfers, revenue tax, insurance, express, etc.		338 56
For amusements		820 00
For salaries: Secretary, $100; treasurer, $100; office assistants, $92; police, $119.15; superintendent, $60; helpers, etc., $35; total		586 15
For race purses (horses)		1,885 00
For premiums on horses	$285 00	
For premiums on cattle	1,131 00	
For premiums on sheep	159 00	
For premiums on swine	86 00	
For premiums on poultry	199 75	
For premiums on farm produce	148 95	
For premiums on dairy products	116 83	
For premiums on domestic,	356 55	
For premiums on implements and machines	29 25	
For premiums on flowers	28 00	
For premiums on fruits	6 50	

For premiums on miscellaneous	$69 70	
Total premiums	$2,616 53	
Not as yet accounted for by preceding treasurer	434 56	
Total disbursements		$8,150 16
Balance (credit)		$6 22

Merritt Wheeler ..... President.
Howard E. Thompson ..... Treasurer.

COBLESKILL

RECEIPTS.

Balance on hand at close of fiscal year 1898		$329 95
From gate receipts	$2,477 95	
From rent of grounds	235 50	
From rent of privileges	835 00	
From annual members	1,100 00	
From miscellaneous advertising, etc.	238 00	
From entries for races (horse)	340 00	
From donations for butter prize "special"	25 00	
From bonds issued, notes given or any other obligation	10,600 00	
From State	3,063 91	
Receipts for 1899		18,915 36
Total receipts		$19,245 31

DISBURSEMENTS.

For payment of bonds, notes or other obligations		$5,766 35	
For permanent improvements		5,530 33	
For labor		392 51	
For material		438 83	
For printing, postage, etc.		513 31	
For insurance		137 00	
For salaries: Office assistants, $172.21; police, $141.75; judges, $352.25; superintendent, $75; total		741 21	
For race purses (horses)		1,060 00	
For special attractions, etc.		726 00	
For premiums on horses	$373 50		
For premiums on cattle	740 00		
For premiums on sheep	357 75		
For premiums on swine	409 50		
For premiums on poultry	408 52		
For premiums on farm produce	288 44		
For premiums on dairy products	21 00		
For premiums on domestic	73 60		
For premiums on fruits	199 02		
For premiums on miscellaneous	968 98		
Total premiums		3,840 31	
Total disbursements			$19,145 85
Balance (credit)			$99 46

O. F. Nelson ..... President.
M. D. Borst ..... Treasurer.

PRATTSBURG UNION.

RECEIPTS.

From gate receipts	$526 65	
From rent of privileges	58 50	
From annual members	128 00	
From teams carrying passengers, $3.80; oats sold, $4.57; total	8 37	
From entries for races (horse)	117 50	
From advertisements in fair book	50 00	
From proceeds from sale of wagon	10 25	
From State	941 72	
Receipts for 1899		$1,840 99
Total receipts		$1,840 99

DISBURSEMENTS.

Balance due at close of fiscal year 1898,	$60 93	
For payment of bonds, notes or other obligations	205 58	
For printing and advertising	110 05	
For permanent improvements	16 25	
For attractions	60 65	
For labor	20 50	
For material	49 41	
For band	43 10	
For rent of grounds	100 00	
For postage, expressage, etc	14 96	
For salaries: Secretary, $50; office assistants, $17; police, $19.50; insurance, $13; superintendent, $9; total,	108 50	
For race purses (horses)	387 50	
For stabling of horses	10 50	
For premiums on horses	$110 00	
For premiums on cattle	68 00	

For premiums on sheep ...	$121 50	
For premiums on swine ...	39 00	
For premiums on poultry ..	23 75	
For premiums on farm produce	78 10	
For premiums on dairy products	7 00	
For premiums on domestic..	107 75	
For premiums on flowers ..	8 50	
For premiums on fruits ...	63 75	
For premiums on miscellaneous	21 00	
Total premiums	$648 35	
Total disbursements		$1,836 28
Balance (credit)		$4 71

H. D. Graves ..... President.
W. B. Pratt ..... Treasurer.

SOUTHERN STEUBEN.

RECEIPTS.

Balance on hand at close of fiscal year 1898.....		$23 51
From gate receipts	$390 46	
From rent of privileges	50 00	
From entries for premiums	155 22	
From entries for races (horse)	71 00	
From State	491 01	
Receipts for 1899		1,157 69
Total receipts		$1,681 20

DISBURSEMENTS.

For permanent improvements		$150 06	
For labor and material		497 59	
For salaries: Secretary, $25; treasurer, $25; total		50 00	
For race purses (horses)		270 00	
For premiums on horses ...	$215 00		
For premiums on cattle ...	94 00		
For premiums on sheep ...	60 00		
For premiums on swine ...	48 00		
For premiums on poultry ..	15 00		
For premiums on farm produce	47 50		
For premiums on dairy products	5 50		
For premiums on domestic..	46 00		
For premiums on implements and machines	6 00		
For premiums on flowers ..	5 50		
For premiums on fruits ...	53 25		
For premiums on miscellaneous	42 75		
Total premiums		638 50	
Total disbursements			$1,606 15
Balance (credit)			$75 05

H. Simpson ..... President.
W. N. Griggs ..... Treasurer.

NORTHERN TIOGA.

RECEIPTS.

Balance on hand at close of fiscal year 1898.....		$438 47
From gate receipts	$1,612 15	
From rent of grounds	8 00	
From rent of privileges	312 00	
From grand-stand.	208 55	
From entries for races (horse).....	432 00	
From State	1,274 48	
Receipts for 1899		3,847 18
Total receipts		$4,285 67

DISBURSEMENTS.

For rent of grounds, $155; hall, etc., $7; total	$162 00
For tents, $187.50; chairs, $17.40; total	204 90
For band, $60; singers, $130; total..	190 00
For labor	282 70
For material	205 49
For forage, $79.23; insurance, $7.50; fees and dues, $15; total	101 73
For ball players	81 00
For revenue	9 27
For salaries: Secretary, $50; printing, $114; office assistants' expenses, $71; police, $3; judges, $80.45; helpers, etc., $17.75; total	336 20
For race purses (horses).....	1,000 00
For premiums on horses ... $98 50	
For premiums on cattle ... 349 50	
For premiums on sheep ... 41 75	

For premiums on swine . . .	$22 50	
For premiums on poultry . .	72 50	
For premiums on farm produce	33 25	
For premiums on dairy products	22 75	
For premiums on domestic..	161 75	
For premiums on implements and machines	30 75	
For premiums on flowers . .	12 25	
For premiums on fruits . . .	75 95	
For premiums on miscellaneous	46 50	
Total premiums		$967 95
Total disbursements		$3,541 24
Balance (credit)		$744 41

Stephen L. Ball . . . . . President.
E. F. Belden . . . . . Treasurer.

HORNELLSVILLE FARMERS' CLUB.

RECEIPTS.

From gate receipts	$4,316 35
From grand-stand.	1,064 85
From rent of privileges	1,178 30
From entries for premiums	614 00
From domestic	71 00
From annual members	564 67
From entries for races (horse)	1,167 50
From fine	17 00

From advertising in premium list....	$132 00	
From State	2,000 00	
Receipts for 1899		$11,125 67
Total receipts		$11,125 67

DISBURSEMENTS.

Incidentals		$176 63
For postage and stationery		88 80
For attractions, $346.90; newspapers, $572.69; music, $124; total		1,043 59
For decorations, $89.24; posting bills, $536.68; total		625 92
For labor		370 00
For office rent, $40.50; water rent, $50; hay and straw, $62.83; total		153 33
For material, $101; gateman, $74.30; ticket-men, $81.85; total		257 15
For railroad advertising		243 67
For printing		293 01
For salaries: Secretary, $500; office assistants, $237.57; judges, $94.20; superintendent, $249.24; total		1,081 01
For race purses (horses), $2,390; race expenses, $258.80; total		2,648 80
For premiums on horses ...	$227 00	
For premiums on cattle	801 50	
For premiums on sheep ...	740 40	
For premiums on swine ...	197 80	
For premiums on poultry ..	490 45	
For premiums on farm produce	214 75	
For premiums on dairy products	47 00	

For premiums on domestic..	$529 20	
For premiums on flowers ..	40 00	
For premiums on fruits ...	104 50	
Total premiums	$3,392 60	
Total disbursements		$10,374 51
Balance (credit)		$751 16

L. A. Waldo ..... President.
Charles Adsit ..... Treasurer.

DRYDEN.

RECEIPTS.

Balance on hand at close of fiscal year 1898.....		$60 04
From gate receipts	$2,558 25	
From grand-stand	313 95	
From rent of privileges	650 44	
From entries for premiums	109 51	
From miscellaneous	52 50	
From advertisements	396 25	
From entries for races (horse).....	480 00	
From bonds issued, notes given or any other obligation	2,000 00	
From State	1,722 22	
Receipts for 1899		8,283 12
Total receipts		$8,343 16

DISBURSEMENTS.

For payment of bonds, notes or other obligations	$1,022 00
For advertising	757 70
For permanent improvements	1,875 24

For miscellaneous		$337 31	
For labor		107 30	
For material		230 36	
For attractions		395 50	
For salaries: Secretary, $50; treasurer, $50; office assistants, $54.02; police, $79.35; judges, $76.90; superintendent, $30.25; helpers, etc., $110.88; total		451 40	
For race purses (horses)		1,241 00	
For premiums on horses	$139 75		
For premiums on cattle	275 65		
For premiums on sheep	71 25		
For premiums on swine	20 50		
For premiums on poultry	539 70		
For premiums on farm produce	94 55		
For premiums on dairy products	45 75		
For premiums on domestic	348 20		
For premiums on implements and machines	22 50		
For premiums on flowers	43 70		
For premiums on fruits	70 75		
For premiums on miscellaneous	218 20		
Total premiums		1,890 50	
Total disbursements			$8,308 31
Balance (credit)			$34 85

S. G. Lupton ..... President.
D. T. Wheeler ..... Treasurer.

UNION AGRICULTURAL AND HORTICULTURAL SOCIETY (TRUMANSBURGH).

RECEIPTS.

From gate receipts	$1,733 70	
From rent of grounds	10 00	
From rent of privileges	246 00	
From entries for races (horse)	302 50	
From advertising	40 00	
From donations	199 50	
From notes given	154 65	
From State	1,259 91	
From sundry receipts	29 84	
Receipts for 1899		$3,976 10
Total receipts		$3,976 10

DISBURSEMENTS.

Balance due at close of fiscal year 1898,	$154 65	
For payment of notes	154 65	
For old bills	25 00	
For interest on note	5 80	
For permanent improvements	205 05	
For sundry bills	646 22	
For labor, preparing ground	75 60	
For rent of ground	125 00	
For printing and advertising	198 05	
For salaries: Secretary, $25; office assistants, $10.50; police, $49.50; judges, $19.83; helpers, etc., $18.62; total	123 45	
For race purses (horses)	850 00	
For gatekeeper	16 50	
For premiums on horses ... $171 50		

For premiums on cattle . . .	$79 00	
For premiums on sheep . . .	102 00	
For premiums on swine . . .	58 50	
For premiums on poultry . .	125 50	
For premiums on farm produce	17 50	
For premiums on dairy products	34 00	
For premiums on domestic..	164 05	
For premiums on flowers . .	10 00	
For premiums on fruits . . .	52 50	
For premiums on special display.	218 50	
Total premiums		$1,033 05
Total disbursements		$3,613 02
Balance (credit)		$363 08

J. T. Howe . . . . . President.
N. A. Mosher . . . . . Treasurer.

WARRENSBURGH ASSOCIATION.

RECEIPTS.

Balance on hand at close of fiscal year 1898.		$1,885 20
From gate receipts	$1,351 44	
From rent of privileges	165 00	
From entries for premiums	11 50	
From entries for races (horse)	290 00	
Receipts for 1899		1,817 94
Total receipts		$3,703 14

DISBURSEMENTS.

For permanent improvements		$1,475 40	
For labor		87 05	
For material		139 19	
For music, $125; printing and advertising, $173.46; total		298 46	
For amusements		100 00	
For salaries: Secretary, $50; office assistants, $8; police, $8; judges, $36; helpers, etc., $135.75; total		237 75	
For race purses (horses)		725 00	
For race purses (bicycle or other) including cost of prizes		65 00	
For premiums on horses	$30 00		
For premiums on cattle	92 50		
For premiums on sheep	32 00		
For premiums on swine	24 00		
For premiums on poultry	20 75		
For premiums on farm produce	33 50		
For premiums on dairy products	55 00		
For premiums on domestic	165 00		
For premiums on implements and machines	13 00		
For premiums on flowers	39 50		
For premiums on fruits	9 00		
Total premiums		514 25	
Total disbursements			$3,642 10
Balance (credit)			$61 04

Henry Griffing ..... President.
Louis E. Reoux ..... Treasurer.

NEWARK DRIVING PARK ASSOCIATION.

RECEIPTS.

From gate receipts	$1,427 05	
From rent of grounds	15 00	
From rent of privileges	290 00	
From entries for premiums	108 00	
From entries for races (horse)	420 00	
From bonds issued, notes given or any other obligation	1,000 00	
Receipts for 1899		$3,260 05
Total receipts		$3,260 05

DISBURSEMENTS.

Balance due at close of fiscal year 1898,	$265 40	
For payment of bonds, notes or other obligations	1,000 00	
For permanent improvements	300 00	
For labor	152 40	
For material	48 60	
For rent of tents	32 75	
For advertising	175 00	
For salaries: Secretary, $50; office assistants, $12; police, $24; judges, $47.25; superintendent, $38.50; helpers, etc., $24; total	195 75	
For race purses (horses)	1,200 00	
For premiums on horses	$130 00	
For premiums on cattle	108 00	
For premiums on sheep	170 00	
For premiums on swine	42 50	
For premiums on poultry	49 00	
For premiums on farm produce	78 25	
For premiums on dairy products	1 00	

For premiums on domestic..	$137 25	
For premiums on implements and machines	6 75	
For premiums on flowers	11 50	
For premiums on fruits	108 25	
For premiums on miscellaneous	73 50	
Total premiums		$916 00
Total disbursements		$4,735 00
Balance (debit)		$1,475 85

W. H. Hyde . . . . . Secretary.
Luther Finley . . . . . Treasurer.

PALMYRA UNION.

RECEIPTS.

Balance on hand at close of fiscal year 1898		$485 82
From gate receipts	$1,611 84	
From entries for premiums	170 00	
From annual members	70 00	
From entries for races (horse)	38 00	
From State	1,806 64	
Receipts for 1899		3,696 48
Total receipts		$4,182 30

DISBURSEMENTS.

For permanent improvements	$36 14
For labor	70 01
For material	57 92
For printing, $63.88; delegates' expenses, $34.93; insurance, $55; total,	153 81

For band		$41 50	
For salaries: President, $20; internal revenue tax, $8.45; sundries, $12.47; hay and straw, $35.19; total		76 11	
For salaries: Secretary, $20; treasurer, $25; office assistants, $42; police, $8; judges, $26; superintendent, $22.50; helpers, etc., $16.28; total		159 78	
For race purses (horses)		156 50	
For attractions, Ashwood, $50; A. T. Little, $30; total		80 00	
For premiums on horses	$238 00		
For premiums on cattle	172 00		
For premiums on sheep	163 00		
For premiums on swine	131 00		
For premiums on poultry	185 50		
For premiums on farm produce	90 75		
For premiums on dairy products	10 25		
For premiums on domestic	6 75		
For premiums on implements and machines	64 50		
For premiums on flowers	10 25		
For premiums on fruits	51 50		
For premiums on miscellaneous	127 50		
Total premiums		1,251 00	
Total disbursements			$2,082 77
Balance (credit)			$2,099 53

C. D. Johnson ..... President.
Harry G. Chapman ..... Treasurer.

SILVER LAKE AGRICULTURAL AND MECHANICAL SOCIETY OF PERRY, N. Y.

RECEIPTS.

Balance on hand at close of fiscal year 1898		$489 87
From gate receipts	$291 80	
From rent of grounds and barn	53 50	
From rent of privileges	21 42	
From grand-stand	14 00	
From benefit enter	92 06	
From entries for races (horse)	72 50	
From donations for cattle barn	188 00	
From State	1,032 14	
Receipts for 1899		1,765 42
Total receipts		$2,255 29

DISBURSEMENTS.

For payment of bonds, notes or other obligations	$144 00	
For hay and straw, $60.64; printing, $53.44; insurance, $16.50; total	130 58	
For permanent improvements	591 66	
For special attractions	125 00	
For labor	54 50	
For general revenue tax	20 85	
For sundries, as postage, express, livery, State dues, traveling expenses, etc.	41 60	
For salaries: Secretary, $50; treasurer, $25; office assistants, $12; judges, $20.12; total	107 12	
For race purses (horses)	150 00	
For premiums on horses	$111 00	

For premiums on cattle	$225 00	
For premiums on sheep	181 00	
For premiums on swine	50 00	
For premiums on poultry	12 00	
Total premiums	$579 00	
Total disbursements		$1,944 31
Balance (credit)		$310 98

W. L. Chapin . . . . . President.
John H. Watson . . . . . Treasurer.

DUNDEE FAIR ASSOCIATION.

RECEIPTS.

Balance on hand at close of fiscal year 1898		$923 80
From gate receipts	$1,141 87	
From rent of grounds	112 50	
From grand-stand	110 30	
From advertising premium list	80 00	
From entries for races (horse)	187 50	
From State	1,110 97	
Receipts for 1899		2,743 14
Total receipts		$3,666 94

DISBURSEMENTS.

For labor	$67 19
For material	149 22
For rent of fair grounds	175 00
For advertising and stationery	129 81
For association dues and taxes	22 52

For salaries: Secretary, $25; treasurer, $25; office assistants, $41; police, $15; judges, $40; superintendent, $37.90; helpers, $39.13; total		$223 03	
For race purses (horses)		569 50	
For race purses (bicycle or other), including cost of prizes		9 00	
For special attraction, cake-walk, $25; dog show, $70; band, $40; total		135 00	
For premiums on horses	$95 00		
For premiums on cattle	126 00		
For premiums on sheep	87 00		
For premiums on swine	21 00		
For premiums on poultry	56 50		
For premiums on farm produce	35 25		
For premiums on dairy products	2 50		
For premiums on domestic	212 25		
For premiums on implements and machines	4 00		
For premiums on flowers	10 00		
For premiums on fruits	71 00		
For premiums on miscellaneous	11 75		
Total premiums		732 25	
Total disbursements			$2,212 52
Balance (credit)			$1,454 42

C. J. Bigelow ..... President.
C. J. Watson ..... Treasurer.

NAMES AND OFFICIAL ADDRESSES

OF THE

SECRETARY OF AGRICULTURE OF THE UNITED STATES, OFFICERS OF AGRICULTURE, DAIRY AND FOOD COMMISSIONS, STATE BOARDS AND BUREAUS, HORTICULTURAL AND OTHER ASSOCIATIONS, TOGETHER WITH A SYNOPSIS OF THE LAWS OF THE UNITED STATES AND OF THE SEVERAL STATES AND TERRITORIES AND CANADA, ON DAIRY PRODUCTS AND THE ADULTERATIONS AND IMITATIONS THEREOF, COMMERCIAL FEEDING STUFFS, FERTILIZERS, ANIMAL INDUSTRY, HORTICULTURE, MAPLE SUGAR, VINEGAR, HONEY BEES, ETC., ETC.

Names and Official Addresses.

UNITED STATES.

Secretary of Agriculture.— James Wilson, Washington, D. C.

Assistant Secretary of Agriculture.— Joseph H. Brigham, Washington, D. C.

ALABAMA.

Commissioner of Agriculture.— Isaac F. Culver, Montgomery, Ala.

ARKANSAS.

Commissioner of Agriculture.— Frank Hill, Little Rock, Ark.

CALIFORNIA.

Board of Agriculture.— Peter J. Shields, Secretary, Sacramento, Cal.

State Dairy Bureau.— William Vanderbilt, Secretary, San Francisco, Cal.

COLORADO.

State Dairy Commissioner.— T. L. Monson, Denver, Col.

State Board of Agriculture.— A. M. Hawley, Secretary, Fort Collins, Col.

CONNECTICUT.

Dairy Commissioner.— John B. Noble, Hartford, Conn.

State Board of Agriculture.— T. S. Gold, Secretary, West Cornwall, Conn.

DELAWARE.

State Board of Agriculture.— Manlove Hayes, Secretary, Dover, Del.

FLORIDA.

Commissioner of Agriculture.— L. B. Wombwell, Tallahassee, Fla.

GEORGIA.

Commissioner of Agriculture.— O. B. Stevens, Atlanta, Ga.

IDAHO.

State Engineer.— F. J. Mils, Boise, Idaho.

ILLINOIS.

State Food Commissioner.— Alfred H. Jones, Room 623, Manhattan Building, Chicago.

State Board of Agriculture.—W. C. Garrard, Secretary, Springfield, Ill.

INDIANA.

State Board of Agriculture.— Charles F. Kennedy, Secretary, Indianapolis, Ind.

IOWA.

State Dairy Commissioner. — B. P. Norton, Des Moines, Iowa.

KANSAS.

State Board of Agriculture.— George W. Glick, President, Atchison, Kan.; F. D. Coburn, Secretary, Topeka, Kan.

KENTUCKY.

Commissioner of Agriculture.— I. B. Nall, Secretary, Frankfort, Ky.

LOUISIANA.

Commissioner of Agriculture and Emigration.— J. G. Lee, Baton Rouge, La.

MAINE.

State Board of Agriculture.— B. Walker McKeen, Secretary, Augusta, Me.

MARYLAND.

C. W. Melville, Secretary Live-stock Sanitary Board, Westminster, Md.

MASSACHUSETTS.

State Board of Agriculture.— J. W. Stockwell, Secretary, Boston, Mass.

Dairy Bureau.— Assistant Executive Officer, George M. Whitaker, Box 1332, Boston, Mass.

MICHIGAN.

Dairy and Food Commissioner.— W. B. Snow, Lansing, Mich.

State Board of Agriculture.— I. H. Butterfield, Secretary, Agricultural College, Mich.

MINNESOTA.

Dairy and Food Commissioner.— W. W. P. McConnell, St. Paul, Minn.

MISSISSIPPI.

Commissioner of Agriculture.— G. W. Carlisle, Jackson, Miss.

MISSOURI.

State Board of Agriculture.— J. R. Rippey, Secretary, Glenwood, Mo.

MONTANA.

Commissioner of Agriculture.— J. W. Calderhead, Helena, Mont.

NEBRASKA.

State Food Commissioner.— The Governor, Lincoln, Neb.

State Board of Agriculture.— R. W. Furnas, Secretary, Brownville, Neb.

NEVADA.

State Board of Agriculture.— Louis Bevier, Secretary, Carson City, Nev.

NEW HAMPSHIRE.

State Board of Agriculture.— N. J. Bacheldor, Secretary, Concord, N. H.

NEW JERSEY.

State Dairy Commissioner.— Geo. W. MacGuire, Trenton, N. J.

State Board of Agriculture.— Franklin Dye, Secretary, Trenton, N. J.

NEW YORK.

Commissioner of Agriculture.— Charles A. Wieting, Albany, N. Y. Geo. L. Flanders, Assistant Commissioner, Albany, N. Y.

NORTH CAROLINA.

Commissioner of Agriculture.— S. L. Patterson, Raleigh, N. C.

State Board of Agriculture.— T. K. Bruner, Secretary, Raleigh, N. C.

NORTH DAKOTA.

Commissioner of Agriculture.— H. U. Thomas, Bismarck, N. D.

Dairy and Food Commissioner.— E. E. Kaufman, Assistant, Fargo, N. D.

OHIO.

Dairy and Food Commissioner.— Joseph E. Blackburn, Columbus, O.

State Board of Agriculture.— W. W. Miller, Secretary, Columbus, O.

OREGON.

State Dairy and Food Commissioner.— J. W. Bailey, Portland, Ore.

State Board of Agriculture.— C. D. Gabrielson, Secretary, Salem, Ore.

PENNSYLVANIA.

State Dairy and Food Commissioner.— Jesse K. Cope, Harrisburg, Pa.

Department of Agriculture.— John Hamilton, Secretary, Harrisburg, Pa.

RHODE ISLAND.

State Board of Agriculture.— George A. Stockwell, Secretary, Providence, R. I.

SOUTH CAROLINA.

Commissioner of Agriculture.— A. P. Butler, Columbus, S. C.

SOUTH DAKOTA.

State Board of Agriculture.— Walter B. Dean, Secretary, Yankton, S. D.

TENNESSEE.

Commissioner of Agriculture.— Thomas H. Paine, Nashville, Tenn.

TEXAS.

Commissioner of Agriculture.— Jeff. Johnson, Austin, Tex.

UTAH.

State Dairy and Food Commissioner.— H. J. Faust, Jr., 128 First South Street, Salt Lake City, U.

State Board of Agriculture.— H. P. Folsom, Secretary, Salt Lake City, U.

VERMONT.

State Board of Agriculture.— C. J. Bell, Secretary, East Hardwick, Vt.

VIRGINIA.

Commissioner of Agriculture.— George W. Koiner, Richmond, Va.

WASHINGTON.

Commissioner of Agriculture.— W. P. C. Adams, Olympia, Wash.

State Dairy and Food Commissioner.— E. A. McDonald, Seattle, Wash.

WEST VIRGINIA.

State Board of Agriculture.— J. B. Garvin, Secretary, Charleston, W. Va.

WISCONSIN.

Dairy and Food Commissioner.— H. C. Adams, Madison, Wis.

State Board of Agriculture.— John M. True, Secretary, Madison, Wis.

WYOMING.

George East, President of Live-stock Commissioners, Cheyenne, Wyo.

TERRITORIES.

ARIZONA.

H. Harrison, Secretary Live-stock Commission, Phœnix, Ari.

NEW MEXICO.

J. H. La Rue, Secretary Cattle Sanitary Board, East Las Vegas, N. M.

Harry F. Lee, Secretary Sheep Sanitary Board, Albuquerque, N. M.

OKLAHOMA.

W. E. Bolton, Secretary Live-stock Sanitary Commission, Kingfisher, Okl.

HAWAII.

Commissioner of Agriculture.— Byron Clark, Honolulu.

CANADA.

Dairy Commissioner.— Prof. James W. Robertson, Ottawa.

Department of Agriculture.— John Dryden, Toronto.

OFFICERS OF VARIOUS SOCIETIES IN THE STATE OF NEW YORK.

New York State Farmers' Congress.— President, James Wood, Mt. Kisco, N. Y.; Secretaries, Geo. L. Flanders, Albany, N. Y.; E. A. Callahan, Albany, N. Y.

Director of Farmers' Institute.— F. E. Dawley, Fayetteville, N. Y.

Five States Milk Producers' Association.— Secretary, H. T. Coon, Little York, N. Y.

New York State Dairymen's Association.— Secretary, W. W. Hall, Gouverneur, N. Y.

American Jersey Cattle Club.— Secretary, J. J. Hemingway, No. 8 West Seventeenth Street, New York.

American Cleveland Bay Breeders' Association.— Secretary, R. P. Stericker, Attica, N. Y.

American Hackney Horse Society.— Secretary, A. H. Godfrey, room 48, Astor Court Villa, West Thirty-Fourth Street, New York.

American Stud-Book, Thoroughbred.— Registrar, James E. Wheeler, 173 Fifth Avenue, New York.

New York State American Merino Sheep Breeders' Association.— Secretary, J. H. Earll, Skaneateles, N. Y.

Standard American Merino Register Association.— Secretary, J. P. Ray, Hemlock Lake, N. Y.

SWINE ASSOCIATIONS.

American Small Yorkshire (Swine) Club.— Secretary, G. W. Harris, 3409 Third Avenue, New York.

Cheshire Swine Breeders' Association.— Secretary, B. B. Badger, Ouaquaga, N. Y.

POULTRY ASSOCIATIONS.

American Buff Plymouth Rock Club.— Secretary, W. C. Denny, Rochester, N. Y.

American Leghorn Club.— Secretary, George H. Burgott, Lawton's Station, N. Y.

American Plymouth Rock Club.— Secretary, A. P. Schwab, Rochester, N. Y.

National Bantam Association.— Secretary, E. Latham, Flatbush, N. Y.

Buffalo Poultry Association.— Secretary, E. C. Pease, Buffalo, N. Y.

HORTICULTURAL SOCIETIES.

Eastern New York Horticultural Society.— Secretary, Edwin O. Powell, Ghent, N. Y.

Western New York Horticultural Society.— Secretary, John Hall, Rochester, N. Y.

BEE-KEEPERS' ASSOCIATIONS.

New York Association of Bee-keepers' Societies.— Secretary, C. B. Howard, Romulus, N. Y.

New York State Bee-keepers' Association.— Secretary, A. H. Knickerbocker, Pleasant Valley, N. Y.

MISCELLANEOUS.

Commissioners of Fisheries, Game and Forests.— Chief Protector, J. Warren Pond, Albany, N. Y.

League of American Sportsmen.— Chief Warden, A. E. Pond, 148 Fifth Avenue, New York.

Audubon Society.— Secretary, Miss Emma H. Lockwood, 243 West Seventy-fifth Street, New York.

New York State Grange.— Master, E. B. Norris, Sodus, N. Y.; Secretary, W. N. Giles, Skaneateles, N. Y.

New York Agricultural Experiment Station.— Director, W. H. Jordan, Geneva, N. Y.

American Association of Nurserymen.— Secretary, George C. Seager, Rochester, N. Y.

Eastern Nurserymen's Association.— Secretary, William Pitkin, Rochester, N. Y.

Cornell University Agricultural Experiment Station.— Director, I. P. Roberts, Ithaca, N. Y.

Standards for Dairy Products

The standards for dairy products are clearly defined in some States, and are in brief as follows, viz.:

CALIFORNIA.

Cheese.

Full-cream cheese, not less than 30 per cent. butter fat.

Half-cream cheese, not less than 15 per cent. butter fat.

Skim cheese must be made of pure skim milk.

This standard does not include "Edam," "Limburger," "Swiss" or hand-made cheese not made by the Cheddar process.

COLORADO.

Cheese.

Colorado full-cream cheese, not less than 35 per cent. butter fat.

Skim cheese, less than 35 per cent. butter fat.

Imitation cheese, all cheese into which any foreign fat or other oleaginous substance has been introduced.

DISTRICT OF COLUMBIA.

Milk.

87.5 per cent. water.

3.5 per cent. fat.

9 per cent. solids, not fat.

Cream.

20 per cent. butter fat.

Butter.

12 per cent. water.

5 per cent. salt.

83 per cent. fat.

Skim Milk.

9.3 per cent. total solids.

GEORGIA.

Milk.

3.5 per cent. fat.

8.5 per cent. solids not fat.

ILLINOIS.

Milk.

88 per cent. water.

12 per cent. milk solids.

3 per cent. fat.

INDIANA.

Milk.

3 per cent. fat.

9 per cent. solids, exclusive of fat.

88 per cent. water.

Butter.

80 per cent. pure milk fats.

15 per cent. water.

6 per cent. salt.

Cheese.

Skimmed cheese, less than 10 per cent. milk fats.

Oleomargarine.

Considered adulterated if it contain in excess of 15 per cent. water, or 6 per cent. salt.

IOWA.

Milk.

Milk containing less than 12½ per cent. milk solids, or 3 per cent. fat, shall be deemed skimmed milk.

Cream.

15 per cent. butter fat.

MAINE.

MILK.

88 per cent. water.

12 per cent. solids.

3 per cent. fat.

By gravimetric analysis.

MARYLAND.

MILK.

87½ per cent. water.

12½ per cent. solids.

3½ per cent. fat.

CONDENSED MILK.

Must be made of standard milk and contain 12.5 per cent. milk solids, of which 3.5 per cent. shall be butter fat.

MASSACHUSETTS.

MILK.

13 per cent. milk solids.

9.3 per cent. milk solids, exclusive of fat.

3.7 per cent. fat, except in the months of April, May, June, July, August and September.

12 per cent. milk solids.

9 per cent. milk solids, exclusive of fat.

3 per cent. fat.

SKIMMED MILK.

9.3 per cent. milk solids.

MICHIGAN.

MILK.

87.5 per cent. water.

12.5 per cent. milk solids.

3 per cent. fat, at a specific gravity, 1.029 to 1.033, at a temperature of 60 degrees Fahrenheit.

MINNESOTA.

MILK.

87 per cent. water.

13 per cent. milk solids.

3.5 per cent. fat.

CHEESE.

Minnesota full-cream cheese, 45 per cent. fat.

Skim cheese, less than 45 per cent. fat.

MISSOURI.

CHEESE.

Full-cream cheese must be made of milk which contains 3 per cent. fat.

Skim cheese, of milk containing less than 3 per cent. fat.

NEW HAMPSHIRE.

MILK.

87 per cent. water.

13 per cent. milk solids.

NEW JERSEY.

MILK.

88 per cent. water.

12 per cent. milk solids.

NORTH DAKOTA.

MILK.

12 per cent. solids.

3 per cent. fat.

CREAM.

15 per cent. fat.

NEW YORK.

MILK.

88 per cent. water.

12 per cent. milk solids.

3 per cent. fat.

CONDENSED MILK.

Milk solids in condensed milk must be equivalent to 12 per cent. solids in standard milk, 25 per cent. of which must be fat.

OHIO.

MILK.

88 per cent. water.

12 per cent. milk solids, 25 per cent. of which shall be fat, except in May and June.

11.5 per cent. milk solids.

CONDENSED MILK.

Must be made of standard milk.

BUTTER.

80 per cent. fat.

CHEESE.

Full-milk cheese, 20 per cent. fat.

Filled cheese, over 10 per cent. fat.

Skim cheese, less than 10 per cent. fat.

OREGON.

MILK.

88 per cent. water.

3 per cent. fat.

8 per cent. solids other than fat. Specific gravity, after removal of cream, 1.038.

CREAM.

20 per cent. butter fat.

CONDENSED MILK.

12 per cent. milk solids, 25 per cent. of which is fat in milk.

CHEESE.

40 per cent. butter fat.

BUTTER.

14 per cent. water.

PENNSYLVANIA.

MILK.

87.5 per cent. water.

12.5 per cent. solids.

3 per cent. fat.

Specific gravity at 60 degrees Fahrenheit, between 1.029 and 1.033.

SKIM MILK.

6 per cent. cream by volume.

2.5 per cent. fat by weight.

Specific gravity, at 60 degrees Fahrenheit, between 1.032 and 1.037.

CHEESE.

Full-cream cheese, 32 per cent. fat.

Three-fourths cream cheese, 24 per cent. fat.

One-half cream cheese, 16 per cent. fat.

One-fourth cream cheese, 8 per cent. fat.

Skimmed cheese, 8 per cent. fat.

Fancy, cottage or pot cheese exempt.

RHODE ISLAND.

MILK.

88 per cent. water.

12 per cent. solids.

2.5 per cent. fat.

SKIMMED MILK.

2.5 per cent. fat.

SOUTH CAROLINA.

MILK.

3 per cent. fat.

8.5 per cent. solids other than fat.

UTAH.

SKIM MILK.

9 per cent. solids, exclusive of fat.

CHEESE.

Skim-milk cheese must not be less than 9 or more than 11 inches in diameter, and not less than 9 inches high.

VERMONT.

MILK.

12.5 per cent. solids.

9.5 per cent. solids, exclusive of fat, except in May and June, 12 per cent. solids.

4 per cent. fat as a paying basis at factories.

Milk sold by wine measure.

WASHINGTON.

MILK.

8 per cent. solids other than fat.

3 per cent. fat.

CHEESE.

Full-cream cheese, 30 per cent. fat.

Skim cheese, less than 30 per cent. fat.

Filled cheese or cheese with less than 15 per cent. fat. is prohibited.

CREAM.

18 per cent. fat.

WISCONSIN.

MILK.

3 per cent. fat.

CHEESE.

Skim-milk cheese must be made 10 inches in diameter and 9 inches high.

CANADA.

MILK.

13 per cent. solids, 3.75 per cent. of which must be dry butter fat for delivery to butter factories.

Vinegar Standards.

CONNECTICUT.

Acidity, 4 per cent. acetic acid.

If cider vinegar, 2 per cent. solids.

DISTRICT OF COLUMBIA.

Acetic acid, 4 per cent.

Solids, 1.5 per cent.

IDAHO.

All vinegar, except cider vinegar, 4.5 per cent. acidity.

Cider vinegar, 2 per cent. solids.

ILLINOIS.

Cider vinegar, 1.75 per cent. solids.

Fruit or grain vinegar, 4 per cent. acetic acid.

Fermented vinegar, not distilled, 1.25 per cent. solids and two and one-half tenths of 1 per cent. ash or mineral matter.

Fruit and distilled vinegars must be branded.

INDIANA.

Acetic acid, 4 per cent.

Cider vinegar, 2 per cent. solids.

MASSACHUSETTS.

All vinegars, acetic acid, 4.5 per cent.

Cider vinegar, 2 per cent. solids.

MICHIGAN.

Cider vinegar, 1.75 per cent. solids.

Fermented vinegar, not distilled, 1.75 per cent. solids and two and one-half tenths of 1 per cent. ash or mineral matter.

Distilled vinegar shall be not colored.

All vinegar, 4 per cent. acetic acid.

MINNESOTA.

Vinegar, 4.5 per cent. acetic acid.

Cider vinegar, 2 per cent. solids.

All vinegar to be branded with the number of grains bicarbonate of potash required to neutralize one fluid ounce of vinegar.

NEBRASKA.

Fruit or grain vinegar, 4 per cent. acetic acid.

Cider vinegar, 2 per cent. solids.

NEW JERSEY.

All vinegar, 4.5 per cent. acetic acid.

Cider vinegar, 2 per cent. solids.

NEW YORK.

Acetic acid, 4.5 per cent.

Cider vinegar, 2 per cent. solids.

OHIO.

Cider vinegar, 2 per cent. solids.

Fermented vinegar, 2 per cent. solids, 2.5 tenths of 1 per cent. ash or mineral matter, and 4 per cent. acetic acid.

PENNSYLVANIA.

Cider vinegar, 1.5 per cent. solids.

Fermented vinegar, not distilled, 1.5 per cent. solids.

All vinegar, 4 per cent. acetic acid.

RHODE ISLAND.

All vinegar, 4.5 per cent. acetic acid.

Cider vinegar, 2 per cent. solids.

SOUTH DAKOTA.

All vinegar, 4.5 per cent. acetic acid.

Cider vinegar, 2 per cent. solids.

Manufacturers shall brand all packages to denote the number of grains of bicarbonate of potash required to neutralize a fluid ounce of vinegar.

UTAH.

Acetic acid, 4.5 per cent.

Cider vinegar, 2 per cent. solids.

VIRGINIA.

Acetic acid, 4.5 per cent.

Cider vinegar, 2 per cent. solids.

WISCONSIN.

Acetic acid, 4 per cent.

Cider vinegar, 2 per cent. solids.

Barrels must be branded to denote the per cent. of acetic acid.

Use of Oleomargarine Forbidden.

The use of oleomargarine, butterine, etc., is prohibited in the asylums, charitable and penal institutions in the following States:

Alabama — Laws of 1895, No. 148.

California — Laws of 1897, ch. 75.

Maryland — Laws of 1900, ch. 496.

Michigan — C. L. 2243.

New York — Laws of 1893, ch. 364.

Ohio — O. S. 4245.

Pennsylvania — Laws of 1893, No. 65.

Utah — Laws of 1896, ch. 60.

Washington — Laws of 1899, ch. 43.

Wisconsin — Laws of 1897, ch. 189.

Dairy Products.

General pure food laws have been passed in twenty-four States and Territories and all the States and Territories have what may be designated as dairy laws, except Texas and Wyoming. Several States have a State Dairy Commissioner, a Commissioner of Agriculture or other similar officers.

The laws regulating the sale of the products of the dairy are designed to protect the producer as well as the consumer, in placing on the market clean, pure, wholesome and unadulterated milk, butter and cheese. Severe penalties are prescribed for manufacturing, selling or offering for sale all imitations and adulterations of dairy products when done in a manner intended to deceive customers, but the sale of skimmed milk and substitutes for butter and cheese, like filled cheese, oleomargarine, butterine and renovated butter is permitted if the substances are branded or marked so as to advise customers of their real character.

In the past two years twenty States have either passed new laws or radically amended their old laws.

The enormous production of oleomargarine in the United States, amounting to 83,139,901 pounds in 1899, of which 5,549,322 pounds were exported, shows that a great quantity is used here.

Owing to the strict enforcement of the law of this State only 222,778 pounds were sold in 1900.

The manufacture of renovated or process butter is rapidly increasing, and oleomargarine is known to enter largely into this product.

Attention is called to the following epitome of the laws of the States and Territories. The intention is to give an idea of their character in brief form; therefore, the penalties and methods of prosecutions have been generally omitted, but fuller information may be had by tracing up the references given at the end of each abstract:

UNITED STATES.

The import duty on fresh milk is two cents per gallon, and on preserved, condensed or sterilized milk is two cents per pound.

Butter is defined as the food product usually known as butter, and made exclusively from milk or cream, with or without salt or color.

The import duty is six cents per pound.

Cheese is defined as the food product known as cheese, and made exclusively from milk or cream. The import duty is six cents per pound.

Each original package of oleomargarine or filled cheese must be labeled as prescribed. Regulations for reports of manufacturers, not covered by law, are made by the Commissioner of Internal Revenue.*

Oleomargarine is defined as certain manufactured substances, extracts, mixtures and compounds, including such mixtures and compounds with butter, made in imitation of butter and intended to be sold for butter. It is taxed two cents per pound (except that for export, which is not taxed).

Import duty is six cents per pound, and internal revenue tax on imported oleomargarine is fifteen cents per pound.

Manufacturers are taxed $600; wholesale dealers, $480; retailers, $48.

Filled cheese is defined as a substance made from milk or skimmed milk with admixture of butter, oils or compounds foreign to such milk, and made in imitation of cheese, and is taxed

*The Grout bill now before Congress provides for reducing the tax on uncolored oleomargarine to one-quarter cent per pound, and increasing the tax on the article when colored to resemble butter to ten cents per pound.

one cent per pound; import duty, six cents per pound, and internal revenue tax on imported filled cheese is eight cents per pound. Original packages must be branded "Filled Cheese," and signs must be displayed wherever sales are made.

Manufacturers are taxed $400; wholesale dealers are taxed $250; retail dealers are taxed $12.

Import duty on sugar of milk is five cents per pound. (Forty-ninth Congress, Session I, 1886, chap. 841. Fifty-first Congress, Session I, 1890, chap. 1244. Fifty-fourth Congress, Session I, 1896, chap. 337. Fifty-fifth Congress, Session I, Schedule A, 236-239.)

ALABAMA.

The manufacture and sale of imitation butter is prohibited for use in hotels, eating-houses, etc., and in hospitals, schools or penal institutions, unless the consumer is advised of its real character, free from coloration or ingredient that cause it to look like butter, by having it stamped by its true name.

Sec. 1. Makes it the duty of the Commissioner of Agriculture to inquire into and examine into the sale or delivery within this State of imitation butter. He has the power to examine witnesses and administer oaths, and if an offense has been committed against the laws of this State a report of the result of the investigation, together with the evidence, is to be reported to the solicitor of the proper circuit or county, to be laid before the grand jury.

§ 2. The expenses incurred under the provisions of this act shall be paid from the funds of the Department of Agriculture derived from the sale of tags. (Laws 1897, No. 597.)

This law provides a penalty for the adulteration of sugar, syrup or molasses, lard, butter or other articles of food, or the selling, offering for sale or exposing for sale any *oleomargarine*, cotton-seed oil or *fatine butter*, without having the same designated by name or brand, and informing each and every purchaser

thereof of the name, class and kind of butter or other articles of food at the time of purchase. (Code, § 4221.)

ALASKA.

This Territory is subject to the laws of the United States.

ARIZONA.

Every person or corporation manufacturing for sale or offering or exposing for sale within the territory of Arizona any article or substance in semblance of butter not the legitimate product of the dairy, or into which the oil or fat of animals not produced from milk enters as a component part, shall distinctly stamp, brand or mark in a conspicuous place on every package of the same the word "Oleomargarine," in case of retail of such article or substance in parcels or otherwise. The seller shall in all cases deliver therewith to the purchaser a printed label bearing the word "Oleomargarine." (Sec. 622, P. C., R. S., 1887.)

Every wholesale or retail dealer in the article or substance described shall keep conspicuously posted up in not less than three exposed positions in or about their respective places of business a printed notice in the following words, "Oleomargarine Sold Here," and each and every hotel-keeper, restaurant-keeper, etc., where meals are furnished for pay, who may use any of the articles or substances described, shall, upon furnishing the same to his guests or customers, if inquiry is made, cause each and every guest to be distinctly informed that the said article is not butter, the genuine production of the dairy, but is oleomargarine. (Sec. 623, P. C., R. S., 1887.)

It is deemed a misdemeanor to adulterate or dilute any article of food, drink, etc., with fraudulent intent to offer the same for sale as unadulterated or undiluted, or to fraudulently sell or keep the same for sale. (Sec. 606, P. C., R. S., 1887.)

ARKANSAS.

Imitation butter, substitutes for butter, whether in wholesale or retail packages, shall be plainly labeled "Adulterated Butter," "Oleomargarine," or such other names as shall properly describe them. In hotels, etc., dishes containing said articles must be plainly marked in same manner. (Laws 1885, chap. 127.)

CALIFORNIA.

The sale of unwholesome or impure milk is prohibited; the State Dairy Bureau shall cause the inspection of all dairies and creameries, and all cattle, horses and hogs, belonging, in use, or appurtenant thereto, for infectious or contagious diseases, and if any such are suspected or found they shall report to the State Veterinarian, who shall order diseased animals slaughtered at the cost and expense of the owners; whenever an inspector finds any place, where milk is produced or dairy products are made, not in good sanitary condition, he shall direct such changes as will put them in good condition. If such changes are not made within thirty days the penalty is a misdemeanor. (Laws 1899, chap. 136.)

No person shall sell or offer to sell roll butter not of full weight to each roll. (Laws 1893, chap. 137.)

Every person who manufactures cheese shall, at the place of manufacture, brand on every cheese and on every package, when shipped, the grade, as follows: "California Full-cream Cheese," "California Half-skim Cheese" and "California Skim Cheese," as the case may be. Brands to be obtained of the State Dairy Bureau.

"California Full-cream Cheese" shall be made wholly from pure milk from which no cream has been removed, and contain not less than thirty percentum of butter fat. "California Half-skim Cheese" shall be made from pure milk and having not

less than fifteen percentum of butter fat, and "California Skim Cheese" shall be made from pure skim milk; provided, that nothing in this section shall apply to "Edam," "Brickstein," "Pineapple," "Limberger," "Swiss," or hand-made cheese not made by the ordinary Cheddar process. (Laws 1897, chap. 76.)

Any substance made in the semblance of butter and designed to be used as a substitute for butter not made from pure milk or cream is declared imitation butter, and any article or compound, other than that produced from pure milk or cream, made in the semblance of cheese, is declared imitation cheese, provided that the use of salt, rennet and harmless coloring matter for coloring the product of pure milk or cream shall not be an imitation; and provided, nothing shall prevent the use of skimmed milk in the manufacture of cheese.

No person shall sell or offer for sale, render or manufacture, or have in possession with intent to sell, use or serve to patrons, guests or inmates, in any hotel, eating-house, public conveyance or boarding-house, or public or private hospital, asylum or institution, any article, product or compound made wholly or in part out of any fat, oil or oleaginous substance not produced directly, and at the time of manufacture, from unadulterated milk or cream, which article, product or compound shall be colored in imitation of butter or cheese; provided, that the manufacture and sale of imitation butter and cheese shall be done in a form to advise the customer of its real character, free from coloration, to cause it to look like butter or cheese made from pure milk or cream, and it must be plainly marked "Substitute for Butter" or "Substitute for Cheese."

No common carrier shall receive for shipment any substitute for butter or cheese unless plainly marked as provided.

No person shall knowingly have in possession any substance designed to be used as a substitute for butter or cheese unless plainly marked, and imitation butter and cheese must be sold as such.

No keeper of a bakery, hotel, boarding-house or other place of public entertainment, or any person furnishing entertainment or board for others, other than his own family, shall offer any substitute for butter or cheese unless he notify such patron that such substance is a substitute for butter or cheese.

No butter or cheese not made wholly from pure milk or cream, salt or harmless coloring matter, shall be used in any of the charitable or penal institutions that receive assistance from the State.

No action can be maintained on account of any sale not in accord with this law.

The enforcement of this law rests with the State Dairy Bureau. (Laws 1897, chap. 75.)

Renovated or process butter must not be sold or offered for sale unless it is plainly branded, stencilled or marked in such manner as the purchaser will be advised of its character. (Laws 1899, chap. 25.)

COLORADO.

It is unlawful for any person to sell or offer for sale unwholesome, watered or adulterated or swill milk or colostrum or milk from cows kept on garbage or any deleterious substance, or from cows kept in connection with any family in which there are infectious diseases. The addition of water or ice to milk is declared an adulteration. (Laws 1893, p. 394, sec. 69.)

Any dealer who shall sell, exchange or deliver or have in possession with intent to sell or offer for sale as pure milk any skimmed milk, from which the cream or any part has been removed, shall be guilty of a misdemeanor. (Laws 1893, p. 394, sec. 72.)

Cheese containing not less than 35 per cent. of butter fat shall be branded "Colorado full-cream cheese," and cheese that contains less than 35 per cent. of butter fat shall be branded "Skim cheese."

All cheese into which any foreign fats or oleaginous substances have been introduced shall be branded "Imitation Cheese."

Failure to stamp the bandage, and to brand the box, at the place of manufacture, is declared a misdemeanor.

The State dairy commissioner issues and records brands. (Laws 1895, p. 58.)

Every person who shall manufacture, sell or offer for sale any product in the semblance of butter, not the unadulterated product of the dairy, shall stamp distinctly on each receptacle the word "Oleomargarine," and in case of retail sales of such commodity the seller shall deliver to the purchaser a printed label plainly bearing the word "Oleomargarine" or "Butterine," as the same may be, together with the name of the manufacturer. Failure to comply with this law is unlawful and contracts void. (Laws 1893, p. 394, sec. 73.)

No person shall mix any glucose or grape sugar with syrup, honey or sugar or any oleaginous substance with any butter or cheese, or mingle any glucose or oleomargarine with any article of food without distinctly stamping or marking the article or package with the true name of such article and the percentage of adulteration, nor shall any person sell any such food without informing the buyer of the fact and the proportions of adulteration. (Laws 1893, p. 393, sec. 66.)

Every person shall be guilty of a misdemeanor who shall manufacture, sell or offer to sell with the intent to serve patrons, guests or boarders of hotels, restaurants, public or private asylums, school, eleemosynary or penal institutions any product or compound made wholly or in part out of any fat, oil or oleaginous substance, not produced directly from unadulterated milk or cream, which shall be in imitation of cheese or yellow butter. This does not prohibit the manufacture or sale of oleomargarine or filled cheese in a separate form in such manner as will advise the consumer of its real character, free from coloration or ingredients that cause it to look like cheese or yellow butter. (Laws 1895, p. 57, sec. 4.)

CONNECTICUT.

Chapter 209 of the Laws of 1899 is an act for the supervision of the milk traffic. This provides for the appointment of a milk inspector in any city or borough for the inspection of all milk sold or offered for sale, all animals producing such milk and the buildings where such animals are kept whether the same be within the limits of such borough or city or not, and the board of wardens and burgesses or common council may prohibit the sale of such milk within the limits of such borough or city, excepting by such persons as shall register their names, residences, etc., in the office of the clerk of such borough or city; the clerk to receive fifteen cents for each name registered.

Section 2 gives the inspector or assistant a right to take samples of milk from any producer or vendor in quantities of not less than one pint upon tender of the market price, but he shall, if such producer or vendor so request, suitably seal and mark a duplicate sample of such milk and leave the same with such producer or vendor. (Laws 1899, chap. 209.)

Money is appropriated to Storrs Agricultural College for investigations of the bacteria of milk, butter, cheese and their effects in the dairy. (Laws 1895, chap. 226.)

Chapter 114 of the Laws of 1893 defines imitation butter as "Any article resembling butter in appearance and not made wholly from the milk of cows," and specifies that the words "butter," "dairy," or "creamery" shall form neither the whole nor a part of the name of any imitation butter, or appear upon any article, or upon any box, tubs or packages containing imitation butter.

The manufacture and sale or taking orders for future delivery of imitation butter is prohibited, unless sold under certain regulations and conditions. Oleomargarine may be manufactured and sold in a separate and distinct form, and if the consumer is advised of its true character, free from coloration or any ingredient that causes it to look like butter. The law requires the use of

signs wherever imitation butter is sold or exposed for sale or delivered with the words "Sold here" on premises, or wagon or vehicle, or, if the delivery is done on a wagon or other vehicle, with the words "Delivered here" preceded by the name of the imitation article. All imitation butter shall be kept in an inclosing package in plain sight with the name of the imitation article. The seller shall inform the buyer that the article he buys is not butter, and shall give the buyer the name of the imitation article. Every person, copartnership or corporation selling or offering for sale any imitation butter, and every keeper of a hotel, boarding-house, etc., furnishing any guest with any imitation butter or food containing it, shall annually on the first day of May register in a book kept by the dairy commissioner the name of the town, street and number of street, with place of business. All signs are to be furnished by the dairy commissioner, to be paid for by the parties using the same at the actual cost thereof. Penalties are prescribed for the violation of this chapter, and evidence of any violation shall be *prima facie* evidence of willful violation with knowledge. (Laws 1893, chap. 114, and Laws 1895, chap. 32.)

DELAWARE.

This law prohibits the manufacture and sale of imitation butter, but the manufacture and sale of oleomargarine is permitted "in a separate and distinct form and in such a manner as will advise the consumer of its real character, free from coloration or ingredient that causes it to look like yellow butter." Provision is made for proceedings against any suspected person and a search warrant may be issued. The powers and duties of the officer are defined, and an analysis of samples taken to be made by State Chemist. The proceedings to be taken in cases of prosecution are specified, and penalties are provided for the violation of the law.

A placard with the word "Oleomargarine" is required to be placed upon or across the surface of the exposed contents of every open tub, package or parcel thereof by every person exposing for sale in this State oleomargarine, butterine or any substance made in imitation or semblance of pure butter, and any person failing to comply with the requirements of this section is deemed guilty of a misdemeanor. (Laws 1895, chap. 209.)

DISTRICT OF COLUMBIA.

No person shall keep a dairy or dairy farm without a permit from the health officer of the District, and the health officer may issue a permit after an investigation, and if the premises shall conform to the regulations governing dairy farms. The permit may be revoked whenever the milk from any farm is exposed to infection by named diseases, so as to render its distribution dangerous to public health.

A permit must be obtained to bring milk into the District, and will be issued after an investigation of the supply on condition that none but pure and unadulterated shall be sent.

No person suffering from or who has been exposed to diphtheria, scarlet fever or other dangerous contagious diseases shall work or assist on or about a dairy farm.

Milk wagons and places where milk is sold shall be plainly marked with the name of the dairy of supply.

No person shall offer or have for sale any unwholesome, watered or adulterated milk, or milk known as swill milk, or milk from cows that are fed on swill, garbage or other like substance, nor butter or cheese made from any such milk.

Vendors in skimmed milk must have every vessel plainly marked "Skimmed milk."

Samples of milk shall be analyzed in the presence of witnesses according to the Babcock method.

The health officer is authorized to make regulations and reference is hereby made to them, as follows:

Regulations:

1. No building shall be used for stabling cows for dairy purposes which is not well lighted, ventilated, drained and constructed, (2) and provided with suitable floors, quick drainage and if practicable with sewer conections, (3) and sufficient feeding boxes, and with covered receptacles, outside of the buildings, for refuse, dung, etc.

4. No water closet, cesspool, urinal, inhabited room or workshop shall be located within any building or shed used for stabling cows or for storage of milk or cream, nor shall any fowl, hog, horse, sheep or goat be kept in any room used for such purpose.

5. The space of room for each cow shall not be less than 500 cubic feet, and the stalls not less than four feet wide.

6. Premises must be kept clean, in good repair and well painted or whitewashed at all times.

7. Premises must be thoroughly cleansed and free from great accumulations of dung.

8. Suspected disease must be reported.

9. Receptacles for milk must be of nonabsorbent material and kept clean, and milk shall be removed promptly from rooms where cows are kept.

10. Cows must be cleaned every day and be properly fed and watered.

11. Proper receptacles for drinking water must be kept in yards accessible to cows, and water must be fresh and clean.

12. Enclosures shall be graded so as to keep the surface reasonably dry. No garbage, urine, fœcal matter or similar substance shall be allowed to remain in such enclosure and no open drain shall run through it.

13. These regulations shall apply to all premises upon which cows' milk is produced for sale.

(Fifty-fifth Congress, session III, c. 164.)

Every person who shall manufacture or offer for sale any article in the semblance of butter or cheese, not the legitimate product of the dairy, but into which the oil or fat of animals enters as a component part, or into which melted butter has been introduced, shall durably stamp, brand or mark upon every tub, firkin, box or package the word " oleomargarine ", and in case of retail sales printed labels shall be delivered with each package with the word " oleomargarine ". (Forty-fifth Congress, session III, c. 22.)

In an act relating to the adulteration of foods and drugs the following standards are defined:

Milk shall be deemed adulterated if it contains less than three and one-half per centum of fat, less than nine per centum of solids not fat, or more than eighty-seven and one-half per centum of water; cream, if it contains less than twenty per centum of butter fat; butter and cheese, if not made exclusively from milk or cream or both, or if the butter contains more than twelve per centum of water, more than five per centum of salt, and less than eighty-three per centum of fat. (Fifty-fifth Congress, session II, c. 25.)

FLORIDA.

The sale of any spurious preparation purporting to be butter is prohibited. Guests at hotels, etc., must be notified if oleomargarine or other spurious butter is used. (R. S. 2662, 2663.)

The sale of any unwholesome provisions, without knowledge of the buyer, and the adulteration of any food with substance injurious to health is prohibited. (R. S. 2660.)

GEORGIA.

It is unlawful " for any person, or corporation, or agent to sell, or expose for sale, or deliver for domestic use, any unclean, impure, unwholesome, adulterated, or skimmed milk, or milk from

which has been held back what is known as 'strippings,' or milk taken from an animal having disease, ulcers, or abscesses, or from an animal within less than fifteen days before, or less than five days after parturition; *provided,* that this section shall not apply to the sale of buttermilk, or to skimmed milk, when sold as such."

The following is the standard for milk as fixed in this act:

"Milk which contains less than three and one-half per centum of butter fat and eight and one-half per cent. of other solids other than butter fat, shall be regarded as skimmed or partially skimmed milk." (No. 207, p. 66, Laws of 1895.)

Imitation butter or cheese is defined to be "every article, substance or compound other than that produced from pure whole milk, or cream from the same, made in the semblance of butter or cheese, and designed to be used as a substitute for butter or cheese made from pure milk or cream from the same", except that salt, rennet and harmless coloring matter, when used, shall not render such product an imitation. The coating, powdering or coloring of any substance to be used as a substitute for butter or cheese, causing such substance or product to resemble butter or cheese, the product of pure milk or cream is prohibited, as is also the combination of animal fats, etc., with butter or cheese, or the coloring of such substitutes a yellow color to resemble genuine butter or cheese. The use of salt, rennet or harmless coloring matter is permitted. The manufacture, sale, keeping or offering for sale of imitation butter or cheese is prohibited, except under certain regulations, such as branding, stamping or stenciling upon the top or side of each tub, box or other vessel in which such substitutes for butter or cheese shall be kept, with the words "substitute for butter" or "substitute for cheese". The possession or control of any substitutes for butter or cheese not marked, as provided, is forbidden, except when in possession of a person for actual consumption of himself or family. The selling or offering for sale of imitation butter or cheese under pretense of being genuine is forbidden, unless the purchaser is notified at the time

of the sale that the same is imitation butter or cheese, and delivering to him a printed statement that it is such, containing the name and address of the producer of such imitation. The use of imitation butter or cheese by hotels, boarding-houses, etc., is not allowed, unless the proprietor or keeper shall keep constantly posted in a conspicuous place a white card with the words "imitation butter used here" or "imitation cheese used here". (Laws 1895, No. 207.)

IDAHO.

This is an act for regulating the manufacture and sale of imitation butter, etc.

Imitation butter is defined to be "every article, substitute or compound, other than that which is procured from pure milk or cream therefrom, made in the semblance of butter, and designed to be used as a substitute for butter made from pure milk or its cream." "The use of salt and harmless coloring matter for coloring the product of pure milk or cream shall not be construed to render such product an imitation." It is unlawful to "coat, powder, or color with annatto or any coloring matter whatever any substance designed as a substitute for butter, whereby such substitute or product so colored or compounded shall be made to resemble butter, the product of the dairy," and also the combination of any animal fat or vegetable oil or other substance with butter for the purpose of imparting thereto a yellow color or any shade of yellow, so that such substitute shall resemble yellow or any shade of genuine yellow butter; nor introduce any such coloring matter or such substance or substances, into any of the articles of which the same is composed." The use of salt, rennet or harmless coloring matter is permitted. The manufacture and sale of imitation butter, whether made or produced in this State or elsewhere, is prohibited unless manufactured or sold under the

regulations hereinafter provided, of substances designed to be used as a substitute for butter, and not manufactured or colored as herein prohibited.

ILLINOIS.

These sections of the Revised Statutes of this State in the Criminal Code have reference to milk, of which the following is an abstract:

Sec. 9. It is unlawful for the purpose of sale for human food to adulterate milk with water or any foreign substances, to knowingly sell milk from which the cream has been taken or from which the "strippings" have been withheld without the purchaser is informed of the fact, or milk from a diseased cow so tainted or corrupted as to be unwholesome, or knowingly bringing or supplying to a cheese or butter factory milk adulterated or tainted as aforesaid, without all interested are informed of the fact.

Sec. 9a. It is unlawful to adulterate milk with a view of offering the same for sale or exchange, or keep cows for the production of milk for market or for sale or exchange, in an unhealthy condition or feed the same on food that produces impure, diseased or unwholesome milk.

Sec. 9b. Retail dealers in milk in any of the cities of this State must have their cans and vehicles conspicuously marked with his, her or their name or names, also indicating the locality from which said milk is obtained or produced.

Sec. 9c. Any person in any of the cities of this State selling milk from which the cream or any part thereof has been taken must have the words "skimmed milk" conspicuously marked upon each can or vessel in which such milk is carried or exposed for sale.

Penalties are attached for the violation of these sections of the law. (Chap. 38, C. C., R. S., 1899.)

This is a law fixing the standard of analysis for milk.

Section 1. "That the standard of analysis for milk in this State as to ingredients and preparations shall be: Water, eighty-eight per cent.; milk solids, twelve per cent., and such milk solids shall contain not less than three per cent. of butter fat. When contracts are made for milk purchased within this State, for delivery within or without this State, no other standard shall be used except by special contract in writing." (Laws 1891, p. 268.)

It is made a misdemeanor to adulterate milk with water or foreign substance for the purpose of sale for human food; or to sell milk from which the cream has been taken without the purchaser is informed of the fact; milk from which what is commonly called "strippings" has been withheld without the purchaser knowing the fact; milk drawn from a diseased cow, knowing her to be diseased; milk so tainted or corrupted as to be unwholesome; milk knowingly supplied to any cheese or butter factory or creamery without all interested being informed of the fact as aforesaid, or whoever, after milk is delivered to a cheese or butter factory or creamery to be manufactured into any substance for human food, knowingly, with intent to defraud on the account of the person supplying the milk or cream, or knowingly add any foreign substance whereby the products shall become unwholesome for human food. (Criminal Code, Laws 1899, chap. 38.)

This law creates a State Food Commissioner, and defines his powers and duties. The Commissioner is to enforce all laws that now exist or that may hereafter be enacted in this State regarding the production, manufacture or sale of dairy products, or the adulteration of any article of food, to inspect dairy and food products and prosecute offenders.

The State's Attorney is to assist in prosecutions, and the State Board of Health may submit samples of food or drink for analysis.

"No person shall, within this State, manufacture for sale, have in possession with intent to sell, offer for sale, or sell, any article

of food which is adulterated within the meaning of this act." The term food is defined. Adulteration is defined and manufactured articles of food are to be plainly stamped.

"Every person who lawfully manufactures any substance designed to be used as a substitute for butter, shall mark, by branding, stamping or stenciling upon the top and side of each tub, firkin, box or other package in which said article shall be kept, and in which it shall be removed from the place where it is produced, in a clear and durable manner in the English language, the word 'Oleomargarine,' or the word 'Butterine,' or the words 'Substitute for Butter,' or the words 'Imitation Butter,' in printed letters in plain, Roman type, each of which shall not be less than three-quarters of an inch in length."

"It shall be unlawful to sell or offer for sale any imitation butter without informing the purchaser thereof, or the person or persons to whom the same is offered for sale, that the substance sold or offered for sale is imitation butter."

(Laws 1899, p. 392.)

INDIANA.

The following rules of the board of health, according to chapter 121, Acts of 1899, establishing a minimum standard of foods, were promulgated October, 1899:

Pure cows' milk shall have at least three per cent. fat and nine per cent. solids, not fat. Water in excess of 88 per centum shall be considered an adulteration, as will the addition of any coloring matter or chemical antiseptic.

Milk sold from a cow four days after coming in or twenty-one days before is deemed polluted.

Milk sold from a cow fed on damaged food or any food which will impart a disagreeable flavor is impure, and considered adulterated.

Milk taken from a cow in a diseased condition, or any cow that

is given impure water, or that is kept under conditions contrary to the rules of the board of health, shall be deemed impure and adulterated.

Butter shall mean that which is made exclusively from milk or cream, and shall contain eighty per cent. of pure milk fat.

If any of the following substances are found in butter it shall be considered adulterated: Water in excess of 15 per centum; salt in excess of 6 per centum; salicylic acid, borax, boric acid, saltpeter, formaldehyde, glucose, sodium carbonate or bicarbonate, or any other added chemical, or any other fat than butter fat, and any other coloring matter except annatto, safflower and harmless coal-tar colors.

The word margarine shall mean all substances prepared in imitation of butter, and whether mixed with butter or not.

If any of the following-named substances are found in "margarine" they shall be considered adulterations: Water in excess of 15 per centum; salt in excess of 6 per centum, glucose, paraffin, salicylic acid and borax, boric acid, saltpeter, formaldehyde, sodium carbonate or bicarbonate or any chemical preservative.

Any coloring matter or mixture of coloring matter other than annatto, saffron, safflower, and turmeric and other harmless vegetable colors, and the harmless coal-tar colors, shall be considered adulterants.

Cheese not made wholly from milk or cream, salt and harmless coloring matter shall be considered adulterated, or if it contains less than 10 per cent. milk fats, then it shall be plainly labeled "Skimmed-milk Cheese." Cheese containing any other fats than milk fats shall be considered adulterated unless marked plainly "Filled Cheese."

Cheese containing other than harmless coloring matter shall be considered adulterated. Cheese containing any chemical antiseptic other than common salt shall be considered adulterated, unless plainly labeled with the name of the antiseptic it contains.

Provision is made for taking samples in triplicate.

IOWA.

This act defines what constitutes imitation butter and cheese; prohibits the coloring of substitutes to resemble butter and the combination of animal fat or vegetable oil, etc., with butter or cheese, and the manufacture and sale of imitation butter or cheese, except when branded, stamped or marked, and the shipping of substitutes for butter or cheese, except as marked, and excepts goods in transit across the State. The possession of such substitutes is not allowed, except by persons having the same for personal use. In case of sales of substitutes, the purchaser is to be notified by statement that the substance sold is a substitute for butter or cheese; hotels, etc., using substitutes must keep a card posted with the words "Substitutes for butter used here," or "Substitute for cheese used here."

Possession of imitations contrary to the provisions of this act is an evidence of intent to use, and to commit a public offense. (Laws 1894, chap. 46.)

It is unlawful to sell or exchange or expose for sale or exchange, deliver or bring to another for domestic use, or to be converted into any product of human food whatsoever, any unclean, impure, unhealthy, adulterated or unwholesome or skimmed milk, provided that skimmed milk may be sold as such.

Milk which is proved by any reliable method of test or analysis to contain less than three pounds of butter fat to the one hundred pounds of milk shall be regarded as skimmed or partially skimmed milk.

It is made the duty of the State Dairy Commissioner to enforce the provisions of the section aforesaid. He is authorized to appoint agents in every city having over ten thousand inhabitants in the State of Iowa to collect samples of milk sold in such cities. Every milk dealer in said cities must obtain a permit of the State Dairy Commissioner, for which he shall pay one dollar annually. (Laws 1892, chap. 50.)

This act is to regulate the testing of milk, at a creamery, cheese factory, or condensed milk factory, by the use of a chemical milk

test, for the purpose of determining the quantity of butter fat in milk purchased or received from the patrons of said factories. It is required to use reliable and accurate tests; such tests shall be clear oil and free from any foreign substance, and produce such measurement of butter fat as would result from the use of a standard Babcock milk tester. A standard tube or bottle is required to be procured from the State Dairy Commissioner's office, certified and marked as provided in this act, and shall be kept for the inspection of such patrons and for the purpose of verifying the tests so used by such person or corporation. The burden of proving such milk test to be reliable shall be upon such person, corporation or factory.

The State Dairy Commissioner is to keep on hand a supply of standard Babcock test tubes or bottles for testing milk, and shall furnish to any person or corporation desiring the same one such tube or bottle, and upon request to certify that the same is reliable and standard, placing thereon the letters "D. C." as a permanent mark thereon, such tube or bottle to be furnished at the actual cost thereof. (Laws 1894, chap. 47.)

KANSAS.

Whoever shall knowingly sell, supply or bring to any cheese factory any milk diluted with water or in any way adulterated, or milk from which any cream has been taken, or skim milk, or tainted or partly sour from want of proper care of pails, etc., after being notified of such taint; or any cheese manufacturer who shall knowingly use any cream from the milk brought to said cheese or butter manufacturer's without the consent of all the owners thereof, shall pay a designated fine. (Laws 1871, chap. 57.)

It is unlawful to bring to, sell or deliver any milk to be manufactured into butter or cheese diluted with water, or skim milk,

or milk taken from diseased animals or use any poisonous or deleterious substances in the manufacture of butter or cheese. (Laws 1874, chap. 83.)

KENTUCKY.

No person shall sell, supply or offer to sell any oleaginous substance or compound of same, as butter, other than the product from unadulterated milk, or cream of the same, or any substance as lard other than that produced from the fat of healthy, sound hogs, unless the same, and the packages, casks or vessels containing same, shall be marked plainly to show the purchaser and establish the character thereof, and distinguish it from genuine butter or lard. (Laws 1888, S. 1894, sec. 1283.)

No person shall sell milk diluted with water, or in any way adulterated, or milk from which any cream has been taken, or sell any "skimmed milk" with intent to defraud, or milk, the product of a diseased animal, or from animals fed upon "still slop," "brewers' slop" or "brewers' grains," or shall use any poisonous or deleterious material or milk from diseased animals as aforesaid in the manufacture of butter or cheese. (G. S., 29, 17, 24; S., 1894, sec. 1274.)

No person shall adulterate, for sale, anything intended for food or drink with any substance injurious to health; and adulterated articles shall be destroyed. (S. 1894, sec. 1273.)

This act, regulating the manufacture and sale of food, makes it unlawful to sell or expose for sale any article of food which is adulterated or misbranded. It shall not be construed to prohibit the manufacture and sale of oleomargarine, butterine or kindred compounds in a separate form, and in such manner as will advise the customer of its real character, free from coloration or ingredient that causes it to look like butter.

Food shall not contain any poisonous ingredients, injurious to health or any antiseptic or preservative not evident to or not known to the consumer.

Heavy fines are prescribed for adulterating or selling any food intended for man, horses or cattle as unadulterated or misbranded.

No civil action shall be maintained in any court on account of any sale or other contract made in violation of this act. (Laws 1898, chap. 52.)

LOUISIANA.

Section 3 of this act reads as follows: "No person shall manufacture, sell or offer for sale within this State, any drugs, groceries, such as sugar, coffee, tea, butter, cheese or any other article to be consumed as food or drink, unless the package, when sold at wholesale or the package from which it is taken, when sold at retail be stamped in plain large letters, showing the true quality and kind of the articles sold within the meaning of this act." (Act 82, Laws 1882.)

Section 1. "That the sale of all substances, such as oleomargarine, butterine, bogus butter or other material, either separately or in combination with any substances other than the product of the cow, as butter, is hereby prohibited."

Section 2. "That any merchant, grocer or other person doing business in this State, who shall barter, sell, handle or give away any of the substances mentioned in the first section of this act, except when so labeled, as unmistakably to indicate their true composition, shall be guilty of a violation of the first section of this act." (Act 81, Laws 1886.)

MAINE.

Municipal officers of towns and cities appoint milk inspectors, who may enter any place where milk is kept for sale, and examine all carriages used for its conveyance; they shall take specimens and cause an analysis or other test, duplicate specimens to be left with the owner of the milk.

Whoever sells or offers for sale, knowingly, milk from cows diseased, sick, or fed upon refuse of breweries or distilleries, or upon any substance deleterious to its quality, or milk to which water or any foreign substance has been added, or sells or offers for sale as pure milk, any milk from which cream has been taken, forfeits twenty dollars for the first, and fifty dollars for the second offense. When milk shall, by the gravimetric analysis, be found to contain over 88 per cent. water, it shall be deemed *prima facie* evidence that said milk has been watered, and when it shall show less than 12 per cent. solids, and less than 3 per cent. fat, it shall be deemed milk from which cream has been taken, and any milk found to contain any foreign substance, shall be deemed milk to which a foreign substance has been added. (R. S., chap. 38, as amended by Laws 1893, chap. 255; Laws 1897, chap. 292.)

All measures, cans or other vessels used in the sale of milk shall annually be sealed by the sealer of weights and measures, by wine measure, and whosoever sells by any other measure forfeits twenty dollars for each offense. (Laws 1887, chap. 20.)

BABCOCK TEST.

All bottles, pipettes or other measuring glasses used by any person at any creamery, butter factory, cheese factory, or condensed milk factory, or elsewhere, in determining by the Babcock test, or by any other test, the value of milk or cream received from different persons at such creameries or factories, shall before such use be tested for accuracy of measurement and for accuracy of the per cent. scale marked thereon. Such bottles, pipettes or measuring glasses shall bear in marks or characters ineffaceable that such test has been made by the authority, mentioned below, and no inaccurate bottles, pipettes, or other glasses shall bear such marks or characters.

It is made the duty of the director of the State college experiment station, or other competent person designated by him, to test the accuracy of all bottles, pipettes or other measuring glasses

used by persons buying or pooling milk or cream, or apportioning butter or cheese made from the same by the contents of butter fat contained therein. The said director or person designated test the accuracy of all bottles, pipettes or other measuring glasses as are found correct, in marks or characters which cannot be erased, and which shall stand as proof that they have been so tested.

Any person who manipulates the Babcock or any other test for the purpose of measuring the butter fat of milk or cream for a basis of apportioning the value of such milk or cream, or the butter or cheese made from same, shall secure a certificate from the superintendent of the dairy school at the State College of Agriculture, that he or she is competent and well qualified to perform such work.

Whoever uses or has in possession with intent to use, at any creamery, butter or cheese factory, or condensed milk factory, any sulphuric acid of less than one and eighty-two one-hundredths of specific gravity in the process known as the Babcock test, or any other test for determining the butter fat of milk and cream, shall be subject to specified fines. (Laws 1895, chap. 169.)

Whoever manufactures or sells any substance or compound made in imitation of yellow butter or cheese, and not made exclusively and wholly of cream or milk, or containing any fats, oil or grease not produced from milk or cream, whether said article is named oleomargarine, butterine, or otherwise, forfeits for the first offense one hundred dollars, and two hundred dollars for each subsequent offense. (Laws 1895, March 26.)

MARYLAND.

"It shall be the duty of all dairymen or herdsmen or private individuals, supplying milk to cities, towns and villages to register their herds or cattle with the live stock sanitary board."

The live stock sanitary board is required to have an inspection made annually of any dairy or premises wherein cows are kept, and if found in an unsanitary condition the said board may prohibit the sale and shipment of milk from such premises until such times as there is a conformity to the prescribed sanitary rules.

These rules require that the buildings are to be properly lighted and ventilated and provided with suitable troughs and feed boxes, and properly drained. Water closets and the like are not to be located within such buildings, and no fowl, hog, sheep or goat is to be kept therein. The premises are to be kept clean and in good repair. Buildings are to be kept thoroughly clean, painted or whitewashed. Receptacles for milk shall be kept clean and purified, and the milk removed without delay from the rooms in which cows are kept. The cows are to be cleaned every day, and properly fed and watered with abundance of pure, clean water. Enclosures are to be graded and drained.

"The live stock sanitary board shall, at the request of the owner or owners of dairy herds, furnish them with a certificate of health whenever the provisions of this article are complied with, and there is no visible sign of disease amongst such herds; such certificates shall be revocable at the discretion of the board." (Laws 1898, chap. 306.)

"Milk shall be deemed to be sophisticated, adulterated or unwholesome when it does not contain twelve and one-half per centum of milk solids, of which three and one-half per centum shall be butter fats; or to which has been added salt, boracic acid, salicylic acid, salicylate of soda, formaldehyde or any other acid, drug, compound or substance, or to which ice or water has been added for any purpose whatsoever; or which has been taken from an animal ten days before or five days after parturition; or which has been taken from a sick or diseased animal; or which has been taken from animals fed in whole or in part on garbage or any substance in a state of fermentation or putrefaction, or food that produces impure, diseased, or unwholesome milk, or

from cows stabled near a house where there is an infectious disease; or from which a portion of the cream has been taken; but nothing in these sections shall be construed as prohibiting the addition of sugar in the manufacture of condensed or preserved milk, or as prohibiting the sale of pure skimmed milk, when sold as such, and from cans plainly and conspicuously marked with the sign or placard "Skimmed Milk" in capital letters, each of a size of not less than one inch square, or as prohibiting the sale of pure, wholesome milk not complying with the provisions of aforesaid sections for the manufacture therefrom of butter, cheese or other products. Nothing in this section shall be construed as prohibiting the feeding of ensilage from silos."

Montgomery county is exempted, except when shipping or selling milk to Baltimore City, and the powers of the Mayor and City Council of Baltimore are not limited to enact ordinances and regulations not inconsistent with the provisions of these sections for the inspection and sale of milk or the products thereof in the city of Baltimore. (Laws 1900, chap. 459.)

"It is unlawful to render, manufacture, sell or exchange, offer for sale or exchange, expose for sale or exchange, take orders for the future delivery of, have in possession, keep in storage, distribute, deliver, transfer or convey, with intent to sell within this State any substance or compound in imitation or semblance of yellow butter produced from pure, unadulterated milk or cream from the same, provided that the manufacture or sale of oleomargarine is permitted in separate form and in such manner as will advise the purchasers and consumers of its real character, free from coloration or ingredients which cause it to look like yellow butter.

"Whoever sells oleomargarine free from coloration or any ingredients that cause it to look like yellow butter, as provided in the previous section, from any dwelling, store, office or public market, shall have conspicuously posted therein a placard or sign in plain Roman letters not less than four inches in length, 'Oleomargarine Sold Here.'"

The selling or offering for sale "to any person who asks, sends or inquires for butter, any oleomargarine, butterine or any substance made in imitation or semblance of butter not made entirely of milk or cream from the milk of cows, with or without coloring matter," is deemed a fraud and punishable by a fine.

The serving to patrons, guests, boarders or inmates of any hotel, eating-house, restaurant, cafe, or any place of public entertainment or boarding-house or public or private hospital, asylum, school or penal institution or help employed therein any article or substance made in violation of the provisions of the first section of this act, or any food made of the same or cooked in the same, is prohibited. If oleomargarine, free from coloration or any ingredient to make it look like yellow butter is served, it is required that the said guest, patron, inmate or help shall be orally notified that the substance so furnished is not butter, and in addition there shall be conspicuously displayed at all times, on each and every side of the room where the latter is served, a sign in plain Roman letters, not less than four inches in length, "Oleomargarine Used and Served Here." (Laws 1900, chap. 496.)

"No condensed or preserved milk shall be manufactured, sold or exchanged, or offered or exposed for sale, or exchange, unless the same be manufactured from or out of pure, clean, healthy, fresh, unadulterated and wholesome milk from which the cream has not been removed either wholly or in part, or unless the proportion of milk sold of same shall be in quantity the equivalent of twelve and fifty one-hundredths per centum of milk solids in crude milk, and of which milk solids three and fifty one-hundredths per centum shall be butter fats. No person shall manufacture, sell or exchange, or offer or expose for sale or exchange, any condensed or preserved milk unless the same be put up, packed or contained in packages with the name of the manufacturers of the said milk distinctly branded or stamped thereon." (Laws 1900, chap. 532.)

Chapter 496, Laws of 1900, forbids sale of oleomargarine to charitable and penal institutions.

MASSACHUSETTS.

This act amends certain sections of previous acts so as to read as follows:

Section 9. "In all prosecutions under this chapter, if the milk is shown upon analysis to contain less than thirteen per cent. of milk solids, or to contain less than nine and three-tenths per cent. of milk solids exclusive of fat, or to contain less than three and seven-tenths per cent. of fat, it shall be deemed for the purpose of this act to be not of good standard quality, except during the months of April, May, June, July, August and September, when milk containing less than twelve per cent. of milk solids, or less than nine per cent. of milk solids, exclusive of fat, or less than three per cent. of fat, shall be deemed to be not of good standard quality.

Section 1. "Whenever the State board of health, dairy bureau, or other State or city authority obtains a sample of milk for inspection, by taking, purchase or otherwise, the analysis of said sample shall, within ten days of the procurement thereof, be sent to the person from whom the sample was obtained." (Laws 1899, chap. 169.)

This is an act relative to renovated butter, and requires that whoever, by himself or agent, sells or exposes for sale or has in his possession with intent to sell any article or compound commonly known as process butter shall have the words "Renovated Butter" conspicuously stamped, labeled, or marked in a straight line in printed letters of plain, uncondensed Gothic type, not less than half an inch in length so that said words cannot easily be defaced, upon the top, side and bottom of every tub, firkin, box or package containing said article or compound.

Renovated butter, if sold by retail not in the original package, the seller shall, by himself or agent, attach to each package so sold, and shall deliver therewith to the purchaser, a label or wrapper bearing in a conspicuous place upon the outside of the package the words "Renovated Butter," in printed letters in a straight line of

plain, uncondensed Gothic type, not less than half an inch in length. (Laws 1899, chap. 340.)

No person shall sell or offer for sale, in hermetically sealed cans, any condensed milk or condensed skim milk, unless in cans which are distinctly labeled with the name of the person or company manufacturing said condensed milk or skim milk, the brand under which it is made and the contents of the can. Condensed milk sold from cans or packages not hermetically sealed shall be branded or labeled with the name of the manufacturer. (Laws 1896, chap. 264.)

When skimmed milk is sold, exchanged or delivered, the vessel, can or package shall be distinctly marked with the words "skimmed milk. The making, using or having in possession any imitation or counterfeit of any seal used by any inspector of milk, collector of samples or other official engaged in the inspection of milk, and the changing or in any way tampering with any sample taken or sealed as provided by law. (Laws 1896, chap. 318.)

It is unlawful to falsely mark any package containing any substance or substitute for butter with the word "Dairy," or the word "Creamery," or the name of any breed of dairy cattle.

Whoever exposes for sale oleomargarine, butterine or any substance made in semblance of pure butter, not marked and distinguished by all the words and stamps required by existing laws, must in addition thereto, upon the exposed contents of every opened tub place a placard with the word "Oleomargarine" in plain letters.

Whoever sells oleomargarine, butterine or other substance in imitation or semblance of pure butter from any public market or store shall post a card printed in letters not less than four inches long the words "Oleomargarine sold here," or "Butterine sold here," and whoever peddles the same must have in letters three inches long, on both sides of cart or wagon, the words "Licensed to sell oleomargarine."

Whoever furnishes any hotel, restaurant or lunch counter, oleomargarine or butterine to any guest or patron, instead of butter, must notify him that the substance so furnished is not butter.

No person shall render, manufacture, sell, or offer to sell or take orders for future delivery any article, product or compound made wholly or partly out of any fat, oil or oleomarginous substance or compound thereof, not produced from pure unadulterated milk or cream from the same, which shall be in imitation of yellow butter, provided nothing shall prohibit the sale of such substance if made in a separate and distinct form and in such manner as will advise the consumer of its real character, free from coloration. (Pub. St. 1894, chap. 280.)

Whoever sells or offers to sell to any person who asks, sends or inquires for butter, any oleomargarine, butterine, or any substance made in imitation of or semblance of pure butter not made entirely from the milk of cows with or without coloring matter, shall be guilty of fraud and fined. (Laws 1894, chap. 280, sec. 2.)

Inspectors of milk shall institute complaints for the violation of this act; they shall take specimens of suspected butter and imitations thereof and cause them to be analyzed, the result of which shall be recorded and preserved for evidence. The expense of such analysis, not exceeding twenty dollars, may be included in costs of prosecution. (Laws 1891, chap. 58.)

MICHIGAN.

The use of oleomargarine, butterine, or any other substitute for butter, in any of the public institutions of the state is prohibited. (C. L. 2243.)

No person shall sell, offer to sell or have in possession any skim-milk, butter-milk, cream and milk in its natural state as drawn from cows into which water, chemicals or preservatives, or

any other foreign substance, has been added. (Laws 1899, chap. 106.)

No person shall render, manufacture, sell or offer to sell or have in possession to sell any article, product, or compound made wholly or in part out of any fat, oil or oleomarginous substance or compound thereof, not produced from unadulterated milk or cream from the same, which shall be in imitation of yellow butter produced from pure unadulterated milk or cream: Provided, That nothing in this act shall be construed to prohibit the manufacture or sale of oleomargarine in a separate and distinct form, and in such manner as will advise the consumer of its real character, free from coloration or ingredients that cause it to look like butter. (C. L. 4985.)

Every person who manufactures or offers for sale in any tub, box, firkin or package or greater quantity, any substance in semblance of butter, into which the oil or fat of animals, not milk, enters as a component part, or into which melted butter or any oil thereof has been introduced, shall stamp, brand or mark plainly upon the top and side of said package the word "oleomargarine." If such substance is composed in part of suet or tallow, the word "butterine"; if such substance is composed in part of lard, and every sale of such substance, from packages not branded or marked fully as the law defines, or delivered without a label as required is unlawful and void, and no action for recovery can be maintained, and penalties are prescribed for selling or offering to sell contrary to these sections. (C. L. 4987-4988.)

No person, knowingly, shall sell as butter any substance made in imitation thereof (C. L. 4989), and the proprietor or keeper of any hotel, restaurant, boarding-house, where food is furnished to persons paying for same or who uses or permits the use of in the preparation of food any oleomargarine, butterine or other such substance shall be considered a person selling imitation butter and liable to the penalties for such violations (C. L. 4990) unless the proprietor shall post conspicuous notices with the words "oleomargarine or butterine sold or used here". (C. L. 4991.)

What articles are deemed adulterated are defined in C. L. 5212.

It is unlawful to sell to any person or to bring to any butter or cheese factory any milk diluted with water, or milk from which cream has been taken, or in any way adulterated or milk from diseased cows, or any milk from any cow fed on distillery or brewery refuse, or to use any poisonous or deleterious material in the manufacture of cheese or butter. (C. L. 11411.)

No person shall sell or expose for sale any unwholesome, watered or adulterated or impure milk or swill milk, or colostrum or milk from cows kept on garbage, swill or any deleterious substance, or from cows kept in connection with a family having contagious diseases. The addition of water or ice is declared an adulteration. (C. L. 11412.)

The police commissioners in Detroit and the common council of other cities and villages may appoint inspectors to enforce the law. (C. L. 11414-11420.)

Any person selling skimmed milk must mark conspicuously on each can or receptacle the words "skimmed milk." (C. L. 14222.)

Milk will be considered adulterated if, upon analysis, it shall contain more than eighty-seven and fifty one-hundredths per centum of watery fluid or less than twelve and fifty one-hundredths per centum milk solids, or less fat than three per centum, or if the specific gravity at sixty degrees, Fahrenheit, is not between 1 29-1,000 to 1 33-1,000. (C. L. 11423.)

No person shall mix glucose or grape sugar with honey, syrup or sugar intended for human food, or any oleomargarine, suine beef fat, lard, or any other foreign substance with any butter or cheese or any oleomargarine with any article of food without distinctly marking or stamping the article with the true name and the percentage in which such articles enter into its composition, and the buyer must be informed of the fact. (C. L. 11429.)

No person shall manufacture, sell or offer to sell as butter and the legitimate product of the dairy or creamery any article not

made exclusively of milk or cream, but into which the oil or fat of animals, or any other oils not produced from milk enters as a component part, has been introduced to take the place of cream. (C. L. 5014.)

No person shall manufacture, deal in, sell or offer to sell any substance in the semblance of or in imitation of cheese made exclusively of unadulterated milk or cream, into which any animal, intestinal or offal fats or oils, or melted butter in any condition have been introduced. (C. L. 5015.)

Every manufacturer of full milk cheese may put a brand upon each cheese, indicating "full milk cheese," and no person shall use such a brand upon any cheese made from milk from which any cream has been taken. The proprietor of every cheese factory, creamery or butter factory is required to register the location with the dairy and food commissioner before April first each year. (C. L. 5016.) Said commissioner shall issue to the cheese manufacturers a uniform stencil brand of "Michigan full-cream cheese," and every such brand shall bear a separate number, and it shall be branded on the outside of every band or package containing full-cream cheese and no other. (C. L. 5016.)

No person shall sell or offer to sell any package of cheese which is falsely branded or labeled. (C. L. 11430.)

No person shall sell or have in possession to sell any oleomargarine or other substance made in imitation of butter, and which is intended to be used as a substitute for butter, unless each vessel, package or roll is distinctly marked, stamped or stencilled with the true name of the substance and all its ingredients, together with the name of manufacturer. No person shall sell such substance without notifying the purchaser.

Placards with the words "Oleomargarine Sold or Used Here" shall be posted in all places where substitutes for butter are used for sale or for food.

No person shall use in connection with the sale of a substitute for butter, the word "Butter," "Creamery," or "Dairy," or the name or representation of any breed of dairy cattle.

For the purpose of this act all mixtures and compounds, as follows, shall be known as "Oleomargarine," viz: All substances known as oleomargarine, oil, oleomargarine oil, butterine, lardine, suine and neutral; all lard and tallow extracts, all mixtures and compounds of tallow, beef fat, suet, lard, lard oil, vegetable oil, butterine, intestinal and offal fat, made in the semblance of butter or intended to be sold as butter. (Laws 1899, chap. 147.)

"Process" butter is defined, and none shall be sold unless conspicuously labelled as such; provision is made for analysis of samples by the dairy and food commissioner, and heavy penalties are prescribed for any violation. (Laws 1899, chap. 254.)

MINNESOTA.

The manufacture and sale of renovated and process butter is prohibited, unless the words "Renovated butter" shall be plainly marked or branded on each tub, pail, or other package or roll, and if exposed for sale, uncovered or not, it must be labeled in such manner as to be easily seen and read by the purchaser. (Laws 1899, chap. 94.)

No person shall sell or offer to sell any milk, cream, butter, cheese or any other dairy products to which has been added any preservatives or antiseptics. (Laws 1899, chap. 257.)

The dairy and food commissioner is empowered to enforce laws relating to the production and sale of dairy products and their imitations.

Sec. 4. No one shall sell any unclean, impure, unwholesome or adulterated milk or cream, or to which preservatives have been added.

Sec. 5. Milch cows shall not be kept in a crowded condition or in stables not perfectly ventilated, or which are filthy and unclean. Nor shall milk be drawn from cows which are unclean or affected with any disease, or from cows fed on distillery waste, brewers' grains, waste from vinegar and sugar factories, or upon any form of food which is unhealthful.

Sec. 9. Any milk which shall show, by analysis, to contain any substance whatever not natural or normal constituents of milk, or milk that has been deprived of any normal constituent, or which is shown to contain more than 87 per centum of water fluids, or less than 13 per centum of milk solids, of which not less than 3½ per cent. shall be fat, is declared to be adulterated.

(6.) No person shall manufacture any food from impure or unclean milk, and no one shall sell any cream from impure milk or cream that contains less than 20 per centum fat.

No one shall sell skimmed milk without marking the can, vessel or package conspicuously, with the words "Skimmed-milk."

(9.) The State standard milk measures or pipettes shall have for milk a capacity of 17.6 cubic centimeters, and for cream 18 cubic centimeters, and the State standard test tubes or bottles for milk shall have a capacity of 2 cubic centimeters of mercury at a temperature of 60 degrees, Fahrenheit, between "zero" and ten on the graduated scale marked on the necks thereof, and the standard test tubes or bottles for cream shall have a capacity of 6 cubic centimeters of mercury at a temperature of 60 degrees, Fahr., between "zero" and 30 on the graduated scale marked on the necks thereof, and it is a misdemeanor to use any other size of milk measure, pipette, test tube or bottle to determine the per cent. of butter fat, where milk or cream is purchased by or furnished to, creameries or cheese factories, and where the value of said milk or cream is determined by the per cent. of butter fat contained in the same.

(11.) No one shall make or sell any mixture or compound intended for use as an adulterant of, or preservative of milk, butter or cheese, nor shall any person add any borax, boric acid, salicylic acid, formaldehyde, formalin or other substances in the nature of adulterants, anti-ferments or preservatives, but this section exempts the addition of pure salt to butter and cheese.

(12, 13.) Whoever by himself or agents conveys milk in carts, wagons or in any manner for the purpose of selling the same in

any city or town of 1,000 inhabitants shall annually be licensed by the State dairy and food commissioner to sell milk within the limits of said city or town, and shall pay one dollar for each vehicle employed. Licenses are not transferable, and are *prima facie* evidence of ownership.

(14.) Impure milk shall not be taken to any butter or cheese factories.

(15.) No person shall manufacture for sale, offer or expose for sale, or sell as butter or as cheese, any substance not the exclusive and legitimate product of milk or cream.

(16.) Imitation butter and cheese are fully described and the sale of any such commodity as butter or as cheese is prohibited. The possession of imitation butter or cheese is *prima facie* evidence of intent to sell.

(17.) The State dairy and food commissioner is authorized to issue to cheese manufacturers a uniform stencil brand bearing a device or motto and the words "Minnesota State Full-cream Cheese." Every brand issued shall be used upon the package and shall bear a different number for each separate manufactory. It shall be unlawful to use such stencil brand on any other than full-cream cheese or packages containing the same, and such cheese shall contain not less than 45 per centum of fats to total solids, and all cheese containing less shall be deemed adulterated.

(18.) Cheese containing less than 45 per centum of fats to solids is declared to be "skim cheese," and it shall be so marked, and all persons who sell such cheese shall post a placard in a conspicuous place with the words "Skim-cheese Sold Here."

(19.) It is the duty of the proprietors of hotels, restaurants, dining-cars, boarding-houses, and lumber camps, who shall supply guests with any substitute for butter, to cause it to be plainly printed upon every bill of fare, before naming any article of food thereon, in capital letters, the words, "Oleomargarine (or butterine) used as a substitute for butter." In case no bill of fare is used, the words named shall be conspicuously posted.

(21.) Proprietors and managers of creameries and cheese factories must report to the commissioner, annually, on blanks furnished by him, the amount of milk and dairy products handled by them, etc.

(22.) It shall be the duty of the commissioner, inspectors and agents to seize any food and dairy products or substitutes thereof, if held in violation of law, and the same shall be forfeited to the State.

(26.) No action shall be maintained on account of any sale or contract made in violation of this law.

Sections relating to methods of procedure and penalties are added to the above. (Laws 1899, chap. 295.)

Any person who receives any milk or cream in cans, bottles or vessels which have been transported over railroads or boat lines, when such cans are to be returned, shall cause them to be emptied before the milk or cream shall become sour, and shall cause said cans to be immediately cleaned and aired. (Laws 1895, chap. 203.)

The city councils may by ordinance provide for the inspection of milk and of dairies and dairy herds, issue licenses for the sale of milk, and authorize the board of health to enforce ordinances, appoint inspectors and chemists not in conflict with the duties of the State dairy and food commissioner. (Laws 1895, chap. 203.)

MISSISSIPPI.

An article of food shall be deemed adulterated:

"If any substance be mixed with it so as to lower or injuriously affect its quality or strength."

"If any inferior or cheaper substances be substituted in whole or in part for the article."

"If any valuable constituent of the article be, in whole or in part, abstracted or extracted."

"If it be an imitation of or sold under the name of another article."

"If it consist, in whole or in part, of a diseased or decomposed, or putrid or rotten animal or vegetable substance, whether manufactured or not; or

"In the case of milk, if it be the produce of a diseased animal."

"If it be colored or coated, or powdered or polished, whereby damage is concealed, or it be made to appear better than it really is, or of greater value; or

"If it contain any added poisonous ingredient, or any ingredient injurious to health; but this section shall not apply to mixtures or compounds recognized as ordinary articles of food." (Sec. 2,096, A. C. 1892, chap. 50.)

"If any person shall sell, keep or offer for sale any adulterated food or drug, the whole of the adulterated article shall be forfeited to the county." (Sec. 2107, A. C. 1892.)

Any person milking the cow of another knowingly without his consent, or confining a calf with any milch cow not his own with intent to procure milk from such cow without the consent of the owner, is punishable by a fine. (Sec. 1187, A. C. 1892.)

"A person who sells or manufactures, exposes or offers for sale, as an article of food, any oleomargarine or other substance in imitation of any article of food, without disclosing the imitation by a suitable and plainly visible mark or brand, indicating and naming what the substance really is, shall be guilty of a misdemeanor. (Sec. 1242, A. C. 1892, Laws 1882, p. 85.)

A privilege tax is levied on oleomargarine as follows:

"On each dealer in oleomargarine or similarly manufactured butter (and this shall apply even though a party has paid a tax as other dealer), $5." (Laws 1895, chap. 5.)

MISSOURI.

Imitation butter is every article, substitute or compound other than that produced from pure milk or cream made in the sem-

blance of butter, and designed to be used as a substitute for butter. Coloring of imitation butter is prohibited. No person shall manufacture or sell or offer to sell any substance in semblance of natural butter whether produced in the State or elsewhere. The manufacture and sale, under provided regulations, may be carried on in substances designed to be used as butter if not colored, as prohibited.

Vessels containing imitation butter must be marked "Substitute for butter," and imitation butter must be shipped under its true name.

Possession of a substitute for butter not marked as provided is presumptive evidence of knowledge of its character, and that the intent is to commit a public offense.

No person shall sell any substance designed to be used as a substitute for butter under the name or pretense that the same is butter.

Substances supposed to be imitation butter may be seized, but if, on analysis, they are not proved to be designed for use as imitation butter, shall be returned to owners or otherwise retained.

Contracts in violation of this law are void. State board of agriculture is authorized to enforce this act. (Laws 1895, p. 26.)

No person shall manufacture, sell or offer to sell at wholesale or retail any article denominated cheese, not made from pure cream or unskimmed milk, unless he shall brand each cheese either "Skimmed-milk Cheese" or the words "Not full-cream cheese."

All cheese made from milk or cream which tests not less than three per cent. of butter fat shall be deemed full-cream cheese, and any cheese made from milk that tests less than three per cent. of butter fat shall be deemed "skimmed milk cheese," or cheese not made from pure unskimmed, unadulterated milk or cream of same, and all shipments of cheese must be branded as and for what they are and not otherwise. (Laws 1897, p. 104.)

All cities and towns shall have power, by ordinance, to license

and regulate milk dairies and the sale of milk, and provide for the inspection thereof. (Laws 1891, p. 163.)

Whoever manufactures any oleaginous substance, resembling butter in appearance, from whatever substance compounded, other than that produced from unadulterated milk or cream from same designed to take the place of butter or cheese, unless same is packed in receptacles which must be branded with its true name, shall be guilty of a misdemeanor.

Any hotel or boarding-house proprietor who shall furnish his guests a compound resembling butter shall legibly mark the vessel in which it is served "Oleomargarine" or "Impure butter." (R. S., 2276-2277.)

MONTANA.

It is unlawful to manufacture, sell, offer to sell or have in possession any substance in resemblance of butter or cheese, not the legitimate product of the dairy, or into which any oleaginous substance is compounded, unless distinctly branded "Oleomargarine" or "Imitation Cheese," and in case of retail sales a printed notice must accompany each delivery. Hotels, boarding-houses, etc., must notify their customers if they use oleomargarine or imitation butter in substitution for genuine. (R. S., 684-685.)

Every person who keeps a cow or any animal, for the production of milk, in a crowded or unhealthy place, or in a diseased condition, or feeds a cow on food that produces impure or unwholesome milk, shall be punished by fine or imprisonment, or both. (R. S. 1095.)

Every person selling oleomargarine, butterine, or imitation cheese shall pay a license of ten cents per pound. (R. S., sec. 4064; Laws 1899, sec. 78.)

NEBRASKA.

It is unlawful to knowingly sell to any person or persons, or deliver or bring to any cheese or butter manufactory in this State, any milk diluted with water or in any way adulterated, or "skimmed milk," or keeping back any part of the milk known as "strippings," with intent to defraud, or knowingly selling any milk the product of a diseased animal, or using any deleterious material in the manufacture of cheese or butter, and the offender is punishable by a fine and is liable to double the amount of damages to the person or persons upon whom such fraud shall be committed. (Sec. 6898, C. S. 1897.)

Any person who shall manufacture, sell or offer for sale any substance in the semblance of butter or cheese, not the legitimate product of the dairy, shall distinctly stamp each receptacle with the word "Oleomargarine" or "Butterine," and in the case of retail sales the vendor shall deliver to the customer a label bearing the same words, and the sale of such substances not so marked shall be void. (Laws 1883, chap. 53.)

Every article made in the semblance of butter, not the product of pure milk or cream, is declared to be imitation of butter, and every compound, made in the semblance of cheese, not the product of pure milk or cream, is declared to be imitation cheese. Salt, rennet or any harmless coloring matter are excepted. (Laws 1895, chap. 78.)

No persons shall color any substance in imitation of butter or cheese not the product of the dairy, or manufacture or offer the same for sale, but they may manufacture and sell such substances if not colored in imitation or semblance of butter or cheese.

Packages in which a substitute for butter or cheese are kept, and in which it shall be removed from the place where it is produced, shall be marked by branding, stamping or stenciling with the words "Imitation butter," or "Imitation cheese," as the case may be.

No substance designed to be used as a substitute for butter or cheese shall be shipped, consigned or forwarded by any common carrier, and said carrier shall not knowingly receive for transportation the same unless it is manufactured and marked as provided and unless it be consigned by the carrier and receipted for by its true name. Provided, that this act shall not apply to any goods in transit between foreign States across the State of Nebraska.

It is unlawful for any person, firm or corporation to have in possession or under his control any substance designed to be used as a substitute for butter or cheese, unless the package containing the same is marked as provided by a preceding section of this act, but this shall not apply to persons having the same in their possession for the actual consumption of themselves or families, and every person, firm or corporation having the same in possession or control not marked as is required shall be presumed to have known during the possession of such substance, the true character and name of the product.

It is unlawful to sell or offer for sale any substance designed to be used as a substitute for butter or cheese, unless the purchaser is informed at the time of sale that the same is a substitute, with a statement referring to the article sold, and such statement shall also give the name and place of the maker.

No keeper of any bakery, hotel, public institution, etc., shall keep, use or serve therein, as food for his guests, boarders, etc., any imitation butter or imitation cheese as defined in this act, unless he keep posted a card in a conspicuous place, upon which shall be printed the words "Imitation butter used here," or "Imitation cheese used here," as the case may be.

The manufacture of imitation butter and imitation cheese within this State is permitted under the restrictions and provisions of the United States law for shipments to points outside of this State. (Laws 1895, chap. 79.)

No action can be maintained on account of any sale or other contract made in violation of, or with the intent to violate any of

the provisions of this act, by any person, firm or corporation knowingly a party to such wrongful sale or other contract, and it is made a misdemeanor to mutilate, obscure, conceal, etc., any mark provided by this act, or permit the same to be done with intent to mislead and deceive.

" Whoever sells or offers for sale, to any person who asks, sends or inquires for butter, imitation butter, or imitation cheese, or any substance made in imitation of or semblance of pure butter, not made entirely from milk of cows, with or without coloring matter, shall be guilty of fraud," and punishable by a fine. (Compiled Statutes of 1897.)

Section 1. This section creates a Food Commission, with headquarters at the Capitol.

Section 2. The Governor of the State is made the Food Commissioner.

Section 4. The said Food Commissioner is charged with the enforcement of this act and all other acts heretofore passed or that may hereafter be passed, concerning dairy products, cider or vinegar, or any imitation or adulteration thereof.

" The said Food Commissioner shall have control over the subject of testing milk and cream in the State of Nebraska, on the farm, in the factory, skimming station, milk or cream depot, milk or cream wagon, or any other place where milk or cream is bought or sold, and may make such regulations concerning the testing of milk and cream as he may deem reasonable and just, and shall have power to establish a minimum standard of butter fat in milk and cream."

The powers and duties of the said Food Commissioner and his duly authorized agents are defined with regard to the inspection of creameries, cheese factories, skimming stations, cider and vinegar manufactories, farm buildings, carriages, cars, etc., used in the manufacture or sale of dairy products, cider or vinegar, or any imitation thereof. They can take samples and have the same analyzed by a competent chemist, the chemist to be allowed a

reasonable fee not to exceed five dollars for each analysis, and the findings of such chemist shall be taken as *prima facie* evidence in court in case of prosecution, the fees and expenses of the chemist to be taxed as costs the same as other costs are taxed.

Section 5. "Every person, firm, or coropration in this State manufacturing or dealing, excepting retailers, in 'imitation butter' or 'imitation cheese,' or both, shall, on or before the tenth day of each month, on blanks provided by said Food Commissioner, make a report in writing to said Food Commissioner, showing the amount of 'imitation butter' or 'imitation cheese,' or both, sold by them during the preceding month, size of packages used, to whom and when sold, business location of the purchaser, amount of 'imitation butter' or 'imitation cheese,' or both, on hand at the close of the month's business, and such other items and facts as may be required by said Food Commissioner, verifying the same under oath, and specifying particularly that they have complied with all the State laws in regard to such 'imitation butter' or 'imitation cheese,' or both as the case may be; provided, that the retailer shall not be required to state to whom sold nor location of the purchaser."

Manufacturers of "ladle" butter, a wholesale dealer in butter or cheese, or both, a wholesale dealer in cider, a wholesale dealer in adulterated cider, a wholesale dealer in cider vinegar, a wholesale dealer in so-called "grain" vinegar, "wine" vinegar or "fruit" vinegar, operators of creameries, of cheese factories, or skimming stations, or persons, firms or corporations doing any business in producing, manufacturing, handling, or selling the product so made, are required to take out an annual permit, said permit describing the occupation and place of business, and conditioned upon a faithful observance of the laws of the State.

Applications for permits shall be in writing and addressed to the said Food Commissioner, verified by the applicant, stating that after this act shall become a law he has not violated any of its provisions.

The said Food Commission, through its accredited officers, shall have the right at any and all times to inspect the premises, methods, and processes of any creamery, cheese factory, etc., and manufacturers of butter and vinegars as named in this section.

Section 8. "For said permits and the services performed in connection therewith, including the inspection as provided by this act, there shall be charged and collected annually as follows:

"From each manufacturer of 'imitation butter' or 'imitation cheese,' the sum of one hundred dollars; from each wholesale dealer in 'imitation butter' or 'imitation cheese,' fifty dollars; from each retail dealer in 'imitation butter' or 'imitation cheese,' twenty-five dollars; from each manufacturer or wholesale dealer in adulterated cider, fifty dollars; from each manufacturer or wholesale dealer in so-called 'grain' vinegar, 'wine' vinegar or 'fruit' vinegar, fifty dollars; from each manufacturer or wholesale dealer in cider, fifteen dollars; from each manufacturer or wholesale dealer in cider vinegar, fifteen dollars; from each creamery, ten dollars; from each cheese factory, ten dollars; from each skimming station, one dollar; from each manufacturer of 'ladle' butter, fifteen dollars; and from each wholesale dealer in butter or cheese, ten dollars, payable in each and every case into the Treasury of the State of Nebraska, as provided by law, in advance of the issuance of said permit."

Section 9. The willful violation of any of the provisions of this act works a revocation of the permit, and the same shall hereafter be held to be null and void. (Laws 1899, chap. 35.)

The manufacture for sale of adulterated articles of food is prohibited.

The term "food" as used in this act is defined and shall include all articles used for food or drink by man, whether simple, mixed or compound.

Mixtures or compounds distinctly labeled as such, and not injurious to health, do not come under the provisions of this act.

It is required that samples shall be furnished by manufacturers or dealers in any article of food as aforesaid to any person interested or demanding the same on application, for the purpose, tendering to him the value of the sample, this sample to be sufficient for the analysis of any such article of food in his possession. (Laws 1897, chap. 99.)

NEVADA.

No person shall sell or offer any impure, adulterated or unwholesome milk, or keep cows for the production of milk for market, or for sale, in a crowded or unhealthy condition, or feed them on food that produces impure, diseased or unwholesome milk, or sell any milk as pure, from which any portion of the cream has been taken, except he may sell skimmed milk as such. The addition of water or any substance is declared an adulteration; any milk from animals fed on distillery, brewery, hotel, or restaurant waste, or on any impure matter, is declared impure and unwholesome.

The board of county commissioners shall appoint a county milk inspector, who shall inspect milk for sale by vendors in his county, and if found adulterated, impure or unwholesome he shall arrest and prosecute said vendors. (R. S. 4898–4904.)

No person shall manufacture for sale any substance in semblance of butter, not the legitimate product of the dairy, unless the package containing the same shall be marked or branded with the word "oleomargarine," and every person who shall sell or offer for sale, or have in his possession with intent to sell, any substance in imitation of butter shall distinctly mark every package, whether for sale at wholesale or retail, "oleomargarine," and every person who shall sell such substance not branded as provided shall be guilty of a misdemeanor. (R. S. 4906-4908.)

NEW HAMPSHIRE.

Milk shall be sold by wine measure. Skimmed milk can be sold only from vessels plainly marked "Skimmed milk."

The sale of unwholesome, impure, or diseased milk or milk from cows fed on brewery refuse and garbage is forbidden.

Municipal officers and selectmen of towns appoint inspectors and vendors must register and obtain license by paying fifty cents yearly.

Vendors convicted of violation of the regulations have their names published.

Milk standard is 13 per cent. solids.

No person shall manufacture, sell or offer for sale any substance in imitation of yellow butter produced from pure, unadulterated milk or cream thereof, or as cheese not made from the legitimate product of the dairy, unless the same is contained in tubs, firkins, boxes or other packages, each of which has upon it, to indicate the character of its contents, the words "Adulterated butter," "Oleomargarine" or "Imitation cheese," as the case may be, in plain Roman letters, and if the substance is a substitute for cheese, unless the cloth surrounding it has a like inscription; and if it is a substitute for butter, unless it shall be of some other color than that of yellow butter. If sold in less quantities than in original packages, then the seller shall label it so as to indicate its true character.

Provided, that this act shall not be construed to forbid the manufacture and sale of oleomargarine in separate form, and in such manner as will advise the consumer of its real character, free from any coloring or ingredient that causes it to look like butter.

It shall be unlawful to peddle or sell, or deliver from any cart or wagon, on any public street, oleomargarine, butterine or any similar substance, unless branded or marked as required by the foregoing sections.

At hotels, boarding-houses, restaurants, etc., guests must be notified when substitutes for butter are served. (Laws 1895, chap. 115.)

It shall be the duty of the State Board of Agriculture to enforce the Law of 1895, chapter 115. (Laws 1889, chap. 58.)

NEW JERSEY.

It is unlawful to supply any cheese or butter factory any milk diluted with water or in any way adulterated, or skimmed milk. (Gen. S., 1895, sec. 3.)

Vendors of skimmed milk must have all vessels labeled or tagged "skimmed milk," and can distribute only from such receptacles as are thus labeled. (Gen. S., 1895, secs. 33, 34.)

No person shall sell or offer for sale any impure, adulterated or unwholesome milk or keep cows in a crowded or unhealthy condition or feed the same on swill, or any substance in a state of putrefaction or anything of an unwholesome nature. (Laws 1882, chap. 82, sec. 2.)

Milk that contains more than 88 per cent. of watery fluids or less than 12 per cent. of milk solids is deemed adulterated.

The State Board of Health is empowered to appoint a State milk inspector, who is empowered to open any can or receptacle, and if, on inspection, he shall find milk that has been adulterated or from which the cream has been taken, he shall take a sample before witnesses for analysis, and condemn the lot and pour the contents of such cans on the ground. Provided, however, if the sample on analysis prove unadulterated the owner shall be paid for the wasted milk.

Duplicate samples are taken, one of which is given to the vendor. (Laws 1891, chap. 210.)

The analysis of milk may be made by any chemist appointed by the State board of health. (Laws 1887, chap. 2.)

The chemists of the State agricultural experiment station shall analyze all samples of milk, butter, or other farm products, or the imitations thereof that may be sent to the station by the dairy commissioner or his agents. (Laws 1888, p. 461.)

No milk which has been watered, adulterated, or changed in any respect by the addition of water, or by removal of cream shall be kept or offered for sale in any city of the first class. (Laws 1883, chap. 185.)

It is unlawful to sell or offer to sell or traffic in, any milk can marked or stamped with the name or initials of any shipper of milk without the consent of the owner, or to erase or destroy any such mark or name. (Laws 1883, chap. 68.)

It is forbidden to use the cans of another in shipping milk. (Laws 1891, chap. 257.)

Coopers or manufacturers of firkins, tubs, or other vessels for the packing of butter or cheese shall brand with name of manufacturer, together with the actual weight of such tub, firkin or vessel. (Laws 1864, chap. 370.)

The sale or offering for sale is prohibited of any oleomargarine, butterine, suine, or any substance in imitation or semblance of natural butter or cheese, or any substance that is rendered, made or compounded out of any animal, vegetable or mixed fat or oil not produced from pure milk or cream, unless contained in or sold out of or in tubs, pails, firkins or other packages marked and labeled as below.

No person shall sell or offer for sale any mixture or compound of natural butter or cheese with oleomargarine, butterine, suine, or any substance not the product of pure milk or cream except such substances as shall be sold out of or in tubs, etc., marked as follows:

All compounds or mixtures not made of pure milk or cream if sold or offered for sale must be branded "oleomargarine," "butterine," "suine" or "imitation butter" or "imitation cheese," as the case may be.

No person shall sell any oleaginous substances not made of pure milk or cream, that are colored, stained, or mixed with annatto or any other coloring matter or substance. (Laws 1886, chap. 84, secs. 1, 2, 3, 4.)

The State Dairy Commissioner (appointed by the State Board of Health) is empowered to enforce the laws relating to oleomargarine, butterine or any imitation of any dairy product.

Notification must be given to a purchaser at the time of sale of imitation butter or cheese.

The manufacture and sale of any substance, which shall be artificially colored in imitation or semblance of yellow butter produced from pure milk or cream is forbidden, except the sale of oleomargarine so marked and packed as to advise the customer of its real character, free from artificial color that causes it to look like butter. (Laws 1895, chap. 332.)

It shall be the duty of the State dairy commissioners to investigate cases reported by the local boards of health where contagious diseases exist among cows kept for supplying milk, and he may prohibit the use of milk from such cows. (Laws 1893, chap. 207.)

It is prohibited to possess or sell any milk containing any unhealthy ingredient, or substance, or which has been transported or stored in an unclean manner or place, or which is produced from diseased cows or cows kept in or stabled in an unhealthful condition. (Laws 1897, chap. 152.)

The board of health may prohibit the sale of milk that may be contaminated by the emanations, exhalations or discharges of any person sick with communicable disease. (Laws 1898, chap. 182.)

NEW MEXICO.

City councils shall provide for the inspection of milk and other dairy products. (Compiled laws 1897, secs. 1244, 1246, 1248-1257, 2402.)

NEW YORK.

The laws of this State, relative to dairy products, etc., will be found in full as one of the appendices of this report.

NORTH CAROLINA.

"Butter" is defined to mean the product manufactured and compounded from fresh and pure milk and cream.

"Oleomargarine" and "butterine" are defined as any article manufactured or compounded in imitation or semblance of butter and it shall be unlawful to manufacture, sell or keep for sale, export or import the same, unless there be securely affixed to each package a label on which shall be printed the chemical ingredients and the properties thereof.

The manufacture and sale is not prohibited, but it must be done in accordance with the regulations of this law. (Laws of 1895, chap. 106.)

The Legislature of 1899 passed an act, entitled "An act to prevent the sale of adulterated and unbranded food," and to repeal a former law on the subject which may be construed to apply to dairy products. (Laws 1899, chap. 86.)

NORTH DAKOTA.

The commissioner of agriculture shall appoint an assistant dairy and food commissioner who has practical knowledge of and experience in the manufacture of dairy products. He is charged under the direction of the commissioner with the enforcement of this act. The biennial report of the commissioner of agriculture shall contain a detailed account of the work, and such facts and statistics in reference to dairy products with such suggestions as he may regard of public importance connected therewith. The

said assistant commissioner shall furnish blanks to all proprietors or managers of creameries, cheese factories, and all the vendors or peddlers of milk, who shall be licensed under the provisions of this act, for the purpose of making a report of the amount of milk and dairy goods handled, and all owners or managers of such creameries, etc., shall, on the first day of November of each year, send to said assistant commissioner a full and accurate report of the amount of business done during the year, as designated under the different headings of such printed blanks.

"Every creamery, cheese factory or combined creamery and cheese factory engaged in the manufacture of butter and cheese shall procure a stencil or brand bearing a suitable device and words which shall clearly designate the quality of the product manufactured and the number and location of the factory, and may contain a special or private brand or name of said factory; every brand shall be used upon the outside of the cheese, and also upon the package containing the same, but in the case of butter, on the package only, and shall, on the first day of November of each year, report to the assistant dairy and food commissioner, the name, location and number of each factory using said brand, and the name or names of the persons at each factory authorized to use the same, together with a copy of each stencil or brand, and the said assistant commissioner shall keep a book in which shall be registered the same." Every person who sells milk from a dairy of five or more cows in any city or town of one thousand inhabitants or more, in this state, shall on the first of June of each year, or within thirty days thereafter be licensed by the said assistant commissioner to sell milk within the limits of said city or town, and shall pay the sum of one dollar each to the said dairy and food commissioner; but any person engaged in such dairy business shall first procure a license, as aforesaid, which shall be valid until the first day of June next succeeding its issue. Licenses shall be used only in the name of the owner of carriages, carts and other vehicles, and shall be conclusive evidence of ownership. No license shall be sold, assigned

or transferred. Each license shall record the name, residence, place of business, number of carriages, carts, etc., used, the name and residence of the driver or other person engaged in selling milk and the number of the license. Each licensee, before engaging in the sale of milk shall cause his name, the number of his license and his place of business to be legibly placed on each outer side of all carriages, carts, etc., used by him in the conveyance and sale of milk, and he shall report to the said assistant commissioner any change of driver or other person employed by him during the term of his license. Whoever sells milk without a license, or violates any of the provisions of this section is punishable by a fine for each offense.

It is required that a license shall be procured for the sale of milk in a store, booth, stand or market place, the fee for the same being one dollar, and the neglect to procure a license is deemed a misdemeanor and punishable by a fine for each and every offense.

If any person shall sell, exchange or expose for sale or exchange, or to be converted into any product of human food, any unclean, unhealthy, adulterated, unwholesome or skimmed milk, or milk from which has been held back what is commonly known as strippings or milk taken from a diseased animal or from an animal within fifteen days before or five days after parturition, or from cows stabled in an unhealthy place or crowded manner, or knowingly feed them on food which produces impure, unwholesome milk, or upon any substance of an unhealthy nature, or shall sell, or offer for sale cream taken from milk, the sale of which has been prohibited, or cream containing less than the amount of butter fat as prescribed in this act, or sell or offer for sale any cheese manufactured from skim milk or partially skimmed milk, without being plainly branded, stamped or marked on the side or top of both cheese and package in a durable manner, the words "skimmed milk cheese," he shall be subject to a fine, but skimmed milk may be sold as such, and in the manner and subject to the regulations prescribed in this act.

"For the purpose of this act the addition of water or any other substance or thing to whole milk, or skimmed milk, or partially skimmed milk, is hereby declared to be an adulteration, and milk which is obtained from animals fed upon any substance of an unhealthy nature is hereby declared impure and unwholesome, and milk which has been proved by any reliable method of test or analysis to contain less than twelve per cent. of milk solids to the hundred pounds of milk, or than three pounds of butter fat to one hundred pounds of milk, shall be regarded as skimmed or partly skimmed milk, and every article not containing fifteen per cent. or more of butter fat shall not be regarded as cream."

"It is hereby made the duty of the assistant dairy and food commissioner to inspect such dairies as he shall deem necessary and enforce the provisions of the two preceding sections."

The manufacture, sale, taking orders for the future delivery of, having in possession, keeping in storage, etc., with intent to sell, any article, product or compound not produced from unadulterated milk or cream from the same, which shall be in imitation of yellow butter produced from pure unadulterated milk or cream of the same is prohibited, but oleomargarine may be manufactured and sold in a separate and distinct form, and in such a manner as will advise the consumer of its real character, free from coloration or ingredient that causes it to look like butter.

It is unlawful to expose for sale oleomargarine, butterine, or any substance made in imitation or semblance of pure butter in tubs, firkins or other original packages, not distinctly, legibly and durably branded, stamped or marked in a conspicuous place with the word "oleomargarine" or "butterine" or "imitation butter," and in retail packages the same words, as the case may be.

It is unlawful to manufacture, sell, offer or expose for sale butter that is produced by taking original packing stock or other butter, or both, and melting the same, so that the butter fat can be drawn off, then mixing the said butter fat with skimmed milk, or milk or cream, or other milk product, and rechurning the said

mixture; or that is produced by any similar process and is commonly known as boiled or process butter, unless the tub, firkin, or other original package in which the same may be put up, be distinctly, legibly and durably branded, stamped or marked in a conspicuous place with the words "renovated butter."

If oleomargarine or butterine is furnished to any guest or patron of a hotel, restaurant, boarding-house or lunch counter, in the place or stead of butter, said guest or patron shall be notified that the substance so furnished is not butter.

Any person or firm who shall sell or offer for sale or make or manufacture any article designed to take the place of cheese or any article termed "filled cheese" is required to stamp each package of the same on the top and side with lamp black and oil the words "filled cheese" or words that shall designate the exact character and quality of the product.

"The assistant dairy and food commissioner shall be director of farmers' institutes in the State and have charge of all matters relating thereto." (Chap. 72, Laws 1899.)

OHIO.

No person shall sell or have in possession for sale any adulterated milk or milk to which water or any foreign substance has been added, or milk from diseased or sick cows, or milk, as pure milk, from which any cream has been removed.

Vendors of skimmed milk must distinctly mark every vessel with the words "skimmed-milk."

Adulterated milk is defined to be milk, upon analysis, found to contain more than eighty-eight per cent. of watery fluid or less than twelve per cent. solids, not less than one-fourth of which must be fat, except during the months of May and June when milk containing less than eleven and one-half per cent. of milk solids shall be deemed not of good quality.

Penalties are prescribed for confining cows and failing to supply the same with a sufficient quantity of good, wholesome food and water or failing to give them proper exercise and change of air or feeding them food that produces impure or unwholesome milk. (O. S. 6950-6951.)

No person shall render or manufacture for sale out of any animal or vegetable oil, not produced from unadulterated milk or cream any article in imitation of natural butter or cheese not produced from pure milk or cream from the same, nor compound with, or add to milk, cream, or butter any acids or other deleterious substance, or fats, or vegetable oils, so as to produce any substance of human food in imitation or semblance of natural butter or cheese, nor shall he keep, sell or offer for sale any such substance in violation of this law, whether such substance, article or compound is made in this State or elsewhere.

"Natural butter and cheese" are fully defined, but no restrictions are placed on the sale of oleomargarine in a separate and distinct form, as will advise the consumer of its real character, free from coloring matter or other ingredient causing it to look like butter.

No person shall manufacture, sell or expose for sale any oleomargarine which contains any methly, orange, butter yellow, annatto, analine dye or any other coloring matter.

Every dealer in oleomargarine shall post conspicuous placards with the words "oleomargarine sold here" and no person shall sell any such unless it be done under its true name, and each package delivered shall have the word "oleomargarine" in printed letters attached.

Restaurant and hotel proprietors and others who use or serve oleomargarine must post cards with the words "oleomargarine sold or used here," and shall not serve such substance, as for butter, when butter is asked for or purported to be served.

Oleomargarine shall mean any substance, not pure butter, of not less than eighty per cent. of butter fats, which substance is made as a substitute for, in imitation of, or to be used as butter.

Whoever shall sell or have in possession for sale any article or compound, made in imitation of cheese, and not made exclusively and wholly of milk or cream, and without salt or harmless coloring matter, or containing any fats, oils or grease not produced from milk or cream, shall have the words "filled cheese," and all cheese made exclusively from milk or cream and containing less than ten per cent. of pure butter fat, shall have the words "skimmed cheese" marked, branded or stamped on every lot, parcel and receptacle.

And in case of retail sales each package shall be labeled or marked strictly what the substance is.

Whoever keeps for sale any "filled cheese" or "skimmed cheese" shall post notices in his place of business "filled cheese or skimmed cheese (as the case may be) sold here" and vendors shall post similar notices on their vehicles.

Guests of restaurants, hotels and elsewhere shall be notified if substitutes for cheese are served to them.

Every manufacturer of full milk cheese may brand upon each cheese the words "full milk cheese" with date when made, and no person shall use such a brand upon any cheese made from milk from which any cream has been taken.

The food and dairy commissioner shall issue to the cheese manufacturers of the State the brands to be used by them, having the words "Ohio State full cream cheese" and shall keep records and numbers of factories.

The words "butter," "creamery" or "dairy" or any word or combination of words embracing the same shall not be placed on any package, roll or vessel containing any imitation dairy product.

No person shall manufacture out of any oleaginous substance an article designed to be sold as butter or cheese, but pure skimmed milk may be used in the manufacture of cheese, as provided.

Penalties are provided for false branding of dairy products, or selling those that are wrongfully labeled.

Dealers in artificial dairy products shall post notices of the commodities they offer and shall only sell them for what they are.

Cards shall also be displayed by keepers of hotels, restaurants, etc., where substitutes of cheese are used.

No person shall pack, box or enclose, ship or consign any substance as butter or cheese in such a manner as to conceal an inferior article by placing a finer grade of butter or cheese upon the surface of the same.

No person shall supply a milk or cheese factory any diluted or adulterated milk with intent to defraud, and no person shall sell as pure milk any diluted or adulterated milk.

No person shall manufacture, sell or expose for sale any condensed milk, unless the package or can shall be labelled or marked with its true name and by whom made, and unless the same is made from pure, clean, healthy, fresh, unadulterated milk, and unless the proportion of milk solids shall be twelve per centum of milk solids in crude milk, and of such solids one-fourth shall be fat.

No butter or cheese not made from pure milk shall be used in the charitable or penal institutions of the State. (Ohio Statutes, 4200-4245.)

All dairies, including the appurtenances thereto, the owners of which offer milk or butter for sale, shall be subject to inspection, and also any manufactory of butter or cheese or places where same may be found for sale, and if any milk is found unhealthy or adulterated, or any cheese or butter is found for sale not of the quality required by law, the commissioner may have analysis made of such samples as he may obtain, and such analysis shall be used in all prosecutions for violation of the dairy laws of this State. (Ohio Statutes, 2194.)

OKLAHOMA.

Milk from a cow not in proper condition of health, or any milk adulterated by water or a deleterious substance, or colored, shall not be delivered.

The adulteration of food or drink, with fraudulent intent, is a misdemeanor.

The buyer shall be informed if provisions are diseased or unwholesome. Boards of health shall destroy any impure article of food offered for sale. (C. S. 1893, chaps. 8, 25.)

OREGON.

The selling or exposing for sale or having in possession for sale or exchange any adulterated food, drink, medicine or fertilizer is prohibited unless plainly marked, establishing its true character and distinguishing it from pure articles of food, drink, etc. If adulterated foods or drinks are used in any public dining or eating room the bill of fare shall state the fact, but if no bill of fare is used a printed notice thereof shall be posted in said dining or eating room, stating the fact that adulterated foods and drinks are being used for foods or for foods and drinks. It is unlawful for any person to offer or expose for sale reworked or mixed butter unless the same is plainly marked "process butter"; and it shall be unlawful for any person to offer or expose for sale any tub or packed butter, remolded into prints, rolls or squares, unless the same is plainly marked "tub butter"; and it shall be unlawful for any person who offers or exposes reworked, mixed, packed or remolded butter to mark or brand such butter with the stamp of any creamery, or with the words "creamery butter."

Cows kept for dairy purposes and confined in stables shall be allowed at least eight hundred cubic feet of air, and shall not be confined facing each other when closer together than six feet, unless there shall be an air-tight partition between such cows at least four feet in height; and said stables shall be well ventilated and kept in a good healthful condition; and if there be any suspected diseased cow or other animal kept in any dairy, the State dairy and food commissioner shall notify the State veterina-

rian, and if any dairy above stated is found to be in a filthy and unhealthful condition the commissioner may notify the proprietor that said dairy must be put in a healthful condition within three days, and if said proprietor neglect or refuse to comply with such orders, then the commissioner may employ other persons to perform such duty; and said proprietor shall pay all the expenses of such labor.

"Any article of food or drink or medicine is deemed to be adulterated within the meaning of this act, when: (1) Any substance or substances have been mixed with it so as to reduce or lower or injuriously affect its quality or strength; (2) if any inferior or cheaper substance or substances have been substituted wholly or in part for it; (3) if any valuable constituent has been wholly or in part abstracted from it; (4) if it is an imitation of or is sold under the name of another article; (5) if it is colored, coated, polished or powdered, whereby damage is concealed, or if it is made to appear better or of greater value as compared with the total solids than it really is; *provided, however,* that salt and annatto, or butter color in which annatto is the principal ingredient, shall not be considered an adulteration when used in dairy products; (6) butter that contains more than fourteen per cent. water; (7) milk that contains more than eighty-eight per cent. water; (8) milk that contains less than three per cent. butter fat; (9) milk that contains less than eight per cent. solids, other than butter fat, and less than 1.038 specific gravity after the cream has been removed; (10) cheese that contains less than forty per cent. butter fat; (11) cream that contains less than twenty per cent. butter fat; (12) condensed milk that contains less than twelve per cent. of milk solids in pure milk, twenty-five per cent. of which shall be pure fat; (13) apple cider vinegar that contains an acidity of less than four and one-half per cent. of absolute acetic acid and two per cent. of cider vinegar solids, and that is made of anything else than absolute apple cider; (14) jellies, jams and fruit sauces put up for sale that contain any other ingredient than pure fruit substance and juices."

At the general election in June, 1900, there shall be elected a commissioner to be known as the Oregon Dairy and Food Commissioner. The qualifications of said commissioner are that he be well versed in dairy matters and can give practical and theoretical instruction in dairying, and it is his duty to impart such knowledge (whenever and wherever opportunity offers within the State) and to collect and disseminate such information as is calculated to develop the dairy interest within the State. The office of the said commissioner is established in the city of Portland in this State, and upon complaint being made by any citizen of the State, or without such complaint, if in his opinion it is necessary, examine into any case of violation or supposed violation of the provisions of this act or any of them. The said commissioner may appoint one deputy in each county of this State and prescribe his duties and compensation. It shall be the duty of said commissioner to visit and inspect each and every creamery operated within the State at least once each year.

"It shall be the duty of the chemist of the State Agricultural College to correctly analyze any and all substances the said commissioner may send him for the purpose of carrying out the provisions of this act, and his certificate of analysis shall be *prima facie* evidence in all courts of justice."

The fine or fines collected in all prosecutions under this act shall go to the common school fund of the State.

"In all prosecutions under the provisions of this act, relating to the sale of diseased foods or that which is unclean, impure or unhealthy; milk drawn from cows for fifteen days next before and five days next after parturition, or from cows fed on unwholesome food, or any calf that has been slaughtered under the age of four weeks shall be deemed and declared unclean, impure and unwholesome."

The using of the box, boxes or brands used by any creamery or dairyman for the purpose of selling the butter of any other creamery or dairyman subjects the offender to all the fines and penalties provided for in this act.

"Every person who sells oleomargarine, butterine, or any imitation butter whatsoever, or other imitation dairy products in this State shall keep a sales-book, in which all sales shall be entered at the time of sale."

Said sales-book shall state the amount sold, with the name and address of the purchaser, and shall be open to the inspection of the State food commissioner or his agents at all times. Upon the application of said commissioner or his authorized agents every railroad or other transportation company is required to give the name and address of any shipper or consignee of any supposed diseased meats or foods of any kind.

The manufacturers of butter and cheese in this State (for sale) in quantities exceeding twenty-five pounds per week are required to report annually to the said commissioner at the end of the year the name and address of manufacturer; name and address of owner of cows; number of pounds of milk purchased; total number of pounds of milk used in the manufacture of butter, and the number of pounds used in the manufacture of cheese; number of pounds of butter and cheese made; number of pounds of butter and cheese sold; *provided*, that there shall be no publication of the amount of butter and cheese made if the maker requests that it shall not be done.

PENNSYLVANIA.

The councils of cities and boroughs are authorized to provide for the inspection of milk. (Laws 1869, No. 56.)

This acts provides penalties for the adulteration of and traffic in unwholesome and impure milk in cities of the second class (Laws 1885, No. 186) and the law of 1878, No. 183, provides regulations for dealing in milk.

It shall be unlawful for any charitable or penal institution to furnish to its inmates any adulterated or imitation dairy products or for any steward or other official to buy such, or for any person to sell such to any officer or steward. (Laws 1893, No. 65.)

The sale or offering for sale of milk or cream, to which has been added boracic acid, salt, salicylic acid, salicylate of soda, or any other injurious compound or substance for coloring the same, shall be a misdemeanor.

The dairy and food commissioner is empowered to enforce this act. (Laws 1897, No. 118.)

No person shall manufacture, sell, offer for sale, or have in possession with intent to sell, any cheese not the legitimate product of pure, unadulterated milk or cream, or any cheese into which any foreign fats have been introduced.

Cheese shall be divided into five grades, and shall be branded for what it is, viz:

"Full cream," "three-fourths cream," "one-half cream" and "skimmed cheese."

"Full cream" shall contain not less than thirty-two per centum of butter fat.

"Three-fourths cream," twenty-four per cent.

"One-half cream," sixteen per cent.

"One-fourth cream," eight per centum of butter fat, and all cheese containing less than eight per centum of butter fat shall be branded "skimmed cheese."

The provisions of this act shall not apply to "fancy cheese" under five pounds each; or to cottage cheese or pot cheese, if they do not contain anything injurious to health. (Laws 1897, No. 164.)

Butter produced by taking original packing stock and other butter, and melting the same, so that the butter oil can be drawn off, mixed with skimmed milk or other material, and by emulsion or other process commonly known as "Boiled" or "Process" butter, shall before sale, be plainly labeled "Renovated Butter." Such butter sold contrary to this act shall be subject to forfeiture and spoliation. (Laws 1899, chap. 121.)

No person shall manufacture, sell or offer any article made wholly or partly out of any fat, oil or oleaginous substance, not

produced from unadulterated milk or cream, which shall be made in imitation of yellow butter.

This does not prohibit the manufacture or sale of oleomargarine or butterine, or similar substance, free from coloration or ingredients that cause it to look like butter, in a separate form and in such manner as will advise the customer of its real character. It shall be unlawful to sell or offer, oleomargarine, butterine or similar substance, not marked distinctly and conspicuously "oleomargarine" or "butterine."

Every person who shall manufacture, sell or offer for sale oleomargarine, butterine or similar substances shall first obtain from the dairy and food commissioner a license authorizing him to engage in the manufacture or sale of oleomargarine or butterine, for which, if a manufacturer, he shall pay one thousand dollars annually; if a wholesaler, five hundred dollars annually; and if a retailer, one hundred dollars; if a restaurant or hotel proprietor, fifty dollars annually; and if a boarding-house keeper, ten dollars annually. The dairy and food commissioner shall furnish to those who pay a license fee signs which shall be hung up in a conspicuous place in the rooms and store rooms. Vendors, after securing a license, shall place on their wagons, in large letters, the sign "Licensed to sell oleomargarine" (or butterine).

Licenses expire December 31st of each year. (Laws 1899, No. 136.)

RHODE ISLAND.

Butter firkins or tubs made or brought into the State shall be branded or marked with the weight and initial letters of the name of maker, before offered for sale; two pounds are allowed for the soaking of brine.

Every person who shall manufacture, sell or offer for sale any substance made in the semblance of butter, or into which has been introduced oil or fat of animals, not the product of milk, or melted butter or any oil thereof, shall stamp, brand or mark upon

the top and side of every package the word "oleomargarine," and in the case of retail sales, the seller shall deliver with each parcel a label marked "Oleomargarine." (Laws 1896, chap. 146.)

Milk shall be sold by wine measure, and the vessels sealed by the sealer of weights and measures of the town where the milk is sold.

The mayor and aldermen of any city and the council of any town may elect inspectors of milk, who shall keep a record of all persons engaged in the sale of milk, and if he has reason to believe any milk has been adulterated, he shall take samples to be tested or analyzed. He shall also take samples of adulterated food if kept or sold contrary to law.

Vendors of milk must see that their names are recorded by the inspector, and keep their names conspicuously on all vehicles used by them in conveying milk.

Milk must not be sold if produced from cows fed on distillery waste, etc, or from sick cows. No person shall sell adulterated milk or milk to which water or any foreign substance has been added.

Skimmed milk, or milk which contains less than two and one-half per centum of milk fats, may only be sold in or from vessels plainly marked "Skimmed milk."

The milk standard calls for not more than eighty-eight per centum of watery fluids, or less than twelve per centum milk solids, or less than two and one-half per centum of milk fats.

The name and place of business of all persons convicted of violation of this act shall be published in two newspapers in the town where the offense was committed. (Laws 1896, chap. 147.)

SOUTH DAKOTA.

No person shall render or manufacture, sell or offer, take orders for future delivery or keep for distribution, transfer or convey any article, made wholly or partly out of fat substance, not pro-

duced from milk or cream, which shall be made in imitation of butter; provided, this act shall not prohibit the manufacture or sale of oleomargarine in such a form as will advise of its real character, free from coloring; and provided, further, that such substance or compound thereof, also all oleomargarine, shall be colored pink.

Whoever furnishes guests in any hotel, restaurant, boarding-house, etc., any oleomargarine or butterine, shall notify said guest that the substance is not butter.

The health officers shall take samples for analysis, and they and the sheriff, or constable, may prosecute. (Penal Code, secs. 3045-3048.)

SOUTH CAROLINA.

It is unlawful to knowingly sell or expose for sale, or deliver for domestic use, any unclean, impure, unwholesome, adulterated or skimmed milk, or milk from which the strippings have been held back, or milk taken from a diseased animal; provided, that butter-milk or skimmed milk may be sold as such. For the purposes of this act, milk which, by reliable test or analysis, contains less than three per centum of butter fat and eight and one-half per cent. of solids, other than butter fat, shall be regarded as skimmed milk.

Imitation butter or imitation cheese is defined to be any substance or compound other than that produced wholly from pure whole milk or cream from the same made in semblance of butter or of cheese, and designed to be used as a substitute for butter or cheese. Provided, that the use of salt, rennet or harmless coloring matter for coloring the product of pure milk or cream shall not be construed to render such product an imitation.

The coating, powdering or coloring with annatto or any coloring matter whatever any substance designed to be used as a substitute for butter or for cheese, whereby such substance or prod-

uct shall be caused to resemble butter or cheese, the product of pure milk or cream, is prohibited.

The combining of any animal fat or vegetable oil or other substance with butter or cheese, or with animal fat or vegetable oil, or combination of the two, or any other substance or substances whatever, any annatto or any other coloring matter, for the purpose or with the effect of imparting thereto a yellow color or any shade of yellow, so that such substance shall resemble genuine yellow butter or cheese, or introducing any such coloring matter or any such substance into any of the ingredients of which such substitute may be composed, is prohibited. Provided, that the use of salt, rennet or harmless coloring matter for coloring the product of pure milk or cream is permitted.

The manufacture, selling, keeping for sale or offering for sale any imitation butter or imitation cheese made or compounded in violation of this act, whether such imitation shall have been made or produced in this State or elsewhere, is prohibited. Provided, that imitation butter or imitation cheese may be manufactured and sold under the regulations hereinafter provided, and not manufactured or colored as herein prohibited.

It is required that any substance lawfully manufactured and designed to be used as a substitute for butter or for cheese shall be marked by branding, stamping or stencilling upon the top and sides of each tub, box or other vessel in which such substitute is kept, or in which it is removed from the place where produced, in a clear and durable manner, the words "Substitute for butter," or "Subtsitute for cheese," as the case may be.

The possession of unmarked imitations or substitutes for butter or for cheese as provided in the preceding sections is prohibited, but a person may have such imitation butter or imitation cheese in his possession for the actual consumption of himself or family.

The selling or offering for sale of any imitation butter or imitation cheese, under the pretence that it is genuine butter or cheese, is prohibited.

Hotels and restaurants knowingly using imitation butter or cheese, or serving the same therein either as food or for cooking purposes, are required to advertise the same by posting a white card in a conspicuous place in the rooms where served of said hotels and restaurants, with the words thereon "Imitation butter used here," or "Imitation cheese used here," as the case may be. Said cards shall not contain any other impressions than the words above prescribed.

"The sworn certificate of 'the chemist of the Clemson Agricultural College of South Carolina' of analysis of a suspected sample shall be recognized in any and all courts of this State as *prima facie* evidence of such analysis, and of the composition and character of such sample." (Laws 1896, No. 96.)

TENNESSEE.

It is unlawful to manufacture, sell or offer to sell, any substance purporting to be butter or cheese, which substance is not made wholly from pure cream or pure milk, unless the same is manufactured under its true name, and unless each package, roll or parcel of such substance and each vessel containing the same shall be distinctly stamped or marked with its true name, and those doing up parcels of this substance for customers must mark it with its true name. (Laws 1879, chap. 169.)

Whoever sells any substance made in the semblance of butter, or as a substitute for butter, and not made wholly from milk or cream shall have the words "Imitation butter" or "Oleomargarine," or "Butterine" (as the case may be) marked on the vessel or wrapper containing the same.

The manufacture or sale of any oleaginous substance not wholly the product of unadulterated milk or cream, which shall be in imitation of yellow butter, is prohibited. Provided, that nothing shall be construed to prohibit the manufacture and sale of oleomargarine, butterine or imitation butter in a separate form

and in such manner as will advise the customer of its real character, free from coloration that causes it to look like butter. (Laws 1895, chap. 101.)

TEXAS.

This State has no dairy law on butter, cheese, milk or the imitations thereof, except a law on the establishment and carrying on of dairies and creamery companies. (Laws 1895, chap. 2.)

UTAH.

No person shall sell or offer to sell or supply any creamery or cheese factory, or to any person whatever, as pure, wholesome, and unskimmed, any unmarketable, adulterated or impure milk.

The seller of milk from which cream or any part has been removed shall mark all vessels and conveyances "Skimmed milk," and said skimmed milk shall contain not less than nine per centum of milk solids, exclusive of fats.

The sale or possession with intent to sell, of any milk, cream, butter, cheese, or other dairy products, or the delivery to any creamery or cheese factory any milk to which boracic acid, salicylic acids or compounds containing them, or other antiseptics injurious to health, is prohibited.

Manufacturing and selling of cheese from skim milk, to which there has been added any fat which is foreign to such milk, is forbidden.

Skimmed milk cheese, or cheese manufactured from milk from which any fats originally contained therein have been removed shall be not less than nine or more than eleven inches in diameter, and not less than nine inches high.

Imitations of yellow butter, not made from pure milk or cream, or any article made in whole or in part from any oil, or oleagi-

nous substance or compound thereof, with or without coloring matter, is prohibited; except that the manufacture or sale of oleomargarine in a distinct form as will advise the customer of its real character, free from coloring matter that causes it to look like butter, and free from any word, brand or marking on packages or wrappers which would in any wise deceive the purchaser.

The sale of substitutes for butter as butter is prohibited.

It shall be unlawful to sell oleomargarine, butterine or any similar substance not marked on the outside of each tub, package or parcel thereof by a placard with the word "Oleomargarine" in conspicuous and plain letters.

Every place where oleomargarine, butterine or any similar substance is sold shall have displayed large placards, such as shall be approved by the dairy and food inspector, clerk of the county, city recorder or town clerk.

Vendors of oleomargarine, butterine, or similar substance shall have their vehicles conspicuously marked "Oleomargarine" in letters three inches in length.

Guests of hotels, etc., shall be notified, if served with substitutes of butter.

No butter or cheese not made wholly from pure milk shall be used in any of the charitable or penal institutions of the State.

In addition to the penalties of fine and imprisonment for the violation of this law, lots of imitation butter or cheese, held or stored, may be seized and confiscated under the direction of the court. (Laws 1896, chap. 60.)

No person selling milk shall have in his possession, at any place where milch cows are kept, any cattle having tuberculosis or other infectious or contagious disease. (Laws 1899, chap. 48.)

VERMONT.

The standard measure of milk shall be wine measure. (V. S., sec. 4300.)

A person who sells or furnishes milk diluted with water, adulterated, or not of good standard quality, or from which cream has been removed or keeps back the "strippings," shall be fined.

In all creameries and cheese factories in the State milk containing four per cent. of butter fat shall be the standard used as a paying basis. (Sec. 4328.)

Samples shall be analyzed at the Agricultural Experiment Station, to be used in cases of suit for penalties. (Sec. 4330.)

Standard milk shall contain not less than twelve and one-half per cent. solids, or not less than nine and one-fourth per cent. of total solids, exclusive of fats, except in May and June, when it shall contain not less than twelve per cent. of total solids. (Sec. 4331.)

No person shall mark or otherwise designate as "creamery" butter or cheese, or the package in which it is contained, when such butter or cheese is not manufactured at a creamery, or shall sell or offer such butter or cheese so marked; provided, that a person may mark the product of his dairy "private creamery," and in such case the name of the maker shall be marked on each package. (Sec. 4332.)

No person shall manufacture out of animal fat or animal or vegetable oils not produced from unadulterated milk or cream an article in imitation of butter or cheese, or mix with or add to milk, cream, or butter any acids or other deleterious substances, animal fats, etc., etc., so as to produce an article in imitation of butter or cheese. (Sec. 4333.)

Any article in imitation of butter shall be colored pink. (Sec. 4336.)

It is unlawful for any proprietor to furnish guests or place on his table where food is sold, any imitation butter that is not colored pink. (Sec. 4337.)

Any person who offers to furnish or sell milk diluted with water or adulterated shall forfeit to the person to whom the milk is sold or furnished not more than one hundred dollars and not less than twenty-five. (Sec. 4975.)

No person shall supply or bring to be manufactured to a butter or cheese manufactory milk diluted with water, or adulterated, or milk from which cream has been removed, or "strippings" kept back, or milk that is tainted or partly sour from want of care in keeping the strainers or vessels clean, and no cream shall be removed from milk so delivered by the persons in the factory. (Sec. 4976.)

All bottles, pipettes or other measuring glasses used in determining the value of milk at factories, by the Babcock test, shall be inspected and marked by the University of Vermont and State Agricultural College.

Persons making tests as a basis for payments must hold certificates of competency for such work. (Laws 1898, chap. 81.)

A law went into effect January 1, 1899, regulating methods at butter and cheese factories. (Laws 1898, No. 82.)

Substitutes and imitations of butter and cheese must be plainly labeled, and the word "dairy" or similar words must not be used in connection therewith. (Laws 1900, chap. 183.)

VIRGINIA.

Each inspector of butter or lard shall examine all offered for inspection in tubs, firkins, kegs or barrels exceeding in weight fifty pounds, and shall stamp or brand the same, if fit to pass, "one," "two" or "three," as he may judge it to be first, second, or third quality.

No person shall knowingly sell or supply, or bring to be manufactured, to any butter or cheese factory, any milk diluted with water, or milk from which cream has been taken; nor shall any person supply to a cheese factory milk that has become sour from want of care of vessels and cows, or from which the strippings have been withheld; nor shall the owner of the factory permit any of the cream to be removed from any milk brought to the factory, without the consent of the owners of said milk.

Every person who shall manufacture, sell or expose for sale any substance in semblance of butter or cheese, not the legitimate product of the dairy, but into which the oil or fat of animals as a component part, or into which melted butter has been introduced to take the place of cream, shall stamp or brand every tub or other package "Oleomargarine." In the case of retail sales of such substances, the seller shall deliver to the purchaser a label bearing the word "Oleomargarine;" and every sale of such article not so stamped or marked shall be void. (Laws 1887, chap. 84.)

No person shall manufacture out of any oleaginous substance, or any compound of similar substances, other than those produced from unadulterated milk or cream, any article designed to take the place of butter or cheese.

This provision shall not apply to pure skim-milk cheese from pure skim milk. (Laws 1891, chap. 526.)

This law is more properly a pure food law, and is placed under the care and jurisdiction of the State Board of Agriculture, who have the duty of analysis; it also defines adulterations, and states how foods and drinks may be sold. (Laws 1900, chap. 655.)

No person, by himself or others, shall render or manufacture, sell or expose for sale any article, product, or compound, made wholly or in part from any fat, oil or oleaginous substance or compound thereof, not produced from unadulterated milk or cream, which shall be in imitation of yellow butter produced from milk or cream; provided, nothing in this act shall prohibit the manufacture or sale of oleomargarine, butterine, or kindred compounds, in a separate and distinct form, and in such manner as will advise the customer of its real character, free from coloration that makes it look like butter.

It shall be unlawful for any keeper or proprietor of any bakery, hotel, boarding-house, restaurant, etc., to use oleomargarine, butterine or kindred compound, either in baking, making or cooking articles of food, or serve same to guests or patrons, without first

posting and exhibiting a sign or placard with the inscription "Imitation butter used here."

It shall be the duty of the commissioner of agriculture to have samples taken of butter, oleomargarine, or butterine, or any adulterated butter wherever offered for sale, and have samples analyzed by a chemist, and when it shall be found that adulterated articles have been sold or offered for sale, it shall be the duty of the commissioner of agriculture to report the facts to the commonwealth's attorney. (Laws 1900, chap. 908.)

WASHINGTON.

It shall be unlawful to furnish as pure, wholesome and unskimmed any adulterated, skimmed, or unwholesome milk.

Milk containing less than three per centum of pure butter fat, or less than eight per centum of milk solids other than fat, or that was drawn from cows fifteen days before or four days after parturition, or from cows having ulcers or other sores, shall be considered adulterated or unwholesome.

Cows shall not be kept in a crowded or unhealthy condition, or fed on distillery waste, or upon any substance declared impure.

Any milk or cream that has been exposed to or contaminated by emanations, discharges or exhalations from persons or animals, or to which has been added any borax, boracic acid, salicylic acid, or other poisonous substances, which prevents or tends to prevent the normal bacterial action of milk, is declared impure and unwholesome.

The State dairy commissioner is authorized to issue to cheese manufacturers a uniform stencil brand.

Every brand shall be used on the outside of the cheese.

It shall be unlawful to use the brand "Washington State Full Cream Cheese" upon any other than full-cream cheese, and such cheese only as shall contain thirty per centum of pure butter fat

and have been manufactured from pure and wholesome milk, from which no portion of the butter fat shall have been removed by skimming or other process, and in the manufacture of which neither butter nor any substance for butter, or any animal or vegetable fats or oils have been used, or any fat which has been extracted from milk in any form and retained for the purpose of filling said cheese.

Cheese containing less than thirty per centum of pure butter fat shall be marked "Skimmed cheese."

The manufacture and sale of any cheese containing less than fifteen per centum of pure butter fat, or so-called "filled cheese," is prohibited. Provided, that nothing in this section shall be construed to apply to Edam, Brickstein, Pineapple, Limburger, Swiss or hand-made cheese or any other fancy cheese. Provided, further, that cheese not made in this State, but which shall be sold or offered, shall be so stamped as to indicate its true character. Provided, further, that no cheese shall be stamped "full cream" which does not comply with the requirements of "Washington full cream," as hereinbefore set forth.

All proprietors and managers of creameries, cheese factories or milk dairies that ship milk, and all vendors and peddlers of milk in the State shall make an annual report of the amount of milk and dairy goods handled, and the amount of business done annually to the dairy commissioner on blanks furnished by him, and the totals and averages only shall be published.

No person, by himself or others, shall render or manufacture, sell, or offer to sell, or serve for patrons, guests, boarders or inmates of any hotel, restaurant, boarding-house, public or private hospital, asylum, school or eleemosynary or penal institution, any article or compound made wholly or partly out of any fat, oil or oleaginous substance, which shall be in imitation of yellow butter. *Provided*, that nothing in this act shall be construed to prohibit the manufacture or sale of oleomargarine in separate form, and in such manner as will advise the consumer of its

real character, free from coloration to resemble butter, or the use of same by patrons of hotels, boarding-houses and public conveyances, where signs are displayed that can be easily read from any part of the rooms.

It is made unlawful to sell or have in possession for sale any cheese containing any substance except salt, rennet, and harmless coloring matter, other than that produced from pure milk or cream thereof.

The dairy commissioner is appointed by the Governor for a term of four years, and it shall be his duty to enforce the dairy laws.

No person shall sell or offer for sale any cream taken from impure or diseased milk, or any cream that contains less than eighteen per centum of pure butter fat.

Every person who conveys milk in carriages, carts or other vehicle, for the purpose of selling the same, shall annually procure from the State dairy commissioner a license to sell milk within the limits of any city or town, and shall pay the sum of one dollar for each cart or other vehicle to be used. Licenses shall be issued only to owners, and no license shall be sold or transferred; the number of the license shall be printed on the vehicles.

Every person, before selling milk from a store, stand, booth or market place, must procure a license from the State dairy commissioner.

No person shall sell milk from which any cream has been removed without first marking each can or other receptacle with the words "Skimmed milk."

The State dairy commissioner shall issue brands marked "Washington Creamery Butter," to be used on the wrapper and packages, and no such brand shall be used upon any other than Washington creamery butter.

Process butter shall not be sold or manufactured unless the package containing it is plainly marked "Renovated Butter." All process butter shipped into the State shall be subject to the same regulations. (Laws 1899, chap. 43.)

The sale and manufacture of adulterated food is prescribed under this law, and the State dairy commissioner is authorized to enforce its provisions. (Laws 1899, chap. 113.)

WEST VIRGINIA.

It is unlawful for any manufacturer or vendor of oleomargarine, artificial or adulterated butter, to manufacture or offer for sale within the limits of this State the same, whether it is manufactured within or without the State, unless it is colored pink. (Laws 1891, chap. 8.)

The adulteration of articles intended for food or drink is prohibited and the adulterated articles are to be forfeited and destroyed. (Laws 1873, chap. 193.)

WISCONSIN.

It is unlawful for any person by himself or agent to offer for sale, furnish or deliver, and have in his possession with intent to sell, milk or cream drawn from a sick or diseased cow or cows kept in filthy and unsanitary condition, or cows fed on refuse or slops from distilleries or vinegar factories, unless such refuse or slop be mixed with other dry sanitary grain or food to a consistency of a thick mush.

It is unlawful for any person by himself or agent to offer for sale or furnish or deliver, or have in possession with the intent to sell, any milk or cream containing any foreign substance or coloring matter, or any chemical or preservative, or for any purpose whatever, but the sale of pasteurized milk or cream, to which viscogen or suerate of lime has been added solely for the purpose of restoring the viscosity, is permitted, if the same be distinctly labeled in such manner as to advise the purchaser of its true character. (Laws 1899, chap. 313.)

This is an act relating to fines for the sale of unmerchantable or adulterated milk, and reads as follows:

Section 1. "Any person who shall sell or offer for sale, or furnish or deliver, or have in his possession, with intent to sell or offer for sale, or furnish or deliver to any creamery, cheese factory, corporation, person or persons whatever, as pure, wholesome and unskimmed, any unmerchantable, adulterated, impure or unwholesome milk, shall, upon conviction thereof, be punished by a fine." (Laws 1897, chap. 166.)

In all prosecutions under this act milk is deemed to be unmerchantable, adulterated, impure or unwholesome, if it is proven to contain less than three percentum of pure butter fat by chemical analysis, or other satisfactory test, or that it has been diluted or any part of the cream abstracted, or that it was drawn from a cow known to the defendant to have been at the time within fifteen days before or less than four days after parturition, or which was known to have any disease, ulcers or other running sores, and in either such case the milk sold or offered for sale, furnished or delivered or had in possession with intent to sell it as pure wholesome and unskimmed shall be held or found to be unmerchantable, adulterated, impure or unwholesome, as the fact may be. Proof of adulteration or skimming may be made with such standard tests and lactometers as are used to determine the quality of milk or by chemical analysis. (Laws 1889, chaps. 344, 425; Laws 1887, chap. 157.)

"Any butter or cheese manufacturer who shall knowingly use or allow any other person to use for the benefit of himself or any other person than he who is entitled to the benefit thereof, any milk or cream from the milk brought to him, without the consent of the owner thereof, or who shall refuse or neglect to keep or cause to be kept a correct account (which shall be open to the inspection of any person furnishing milk to him) of the amount of milk daily received, or of the number of pounds of butter, and the number and aggregate weight of cheese made by him each

day, or of the number of cheese cut or otherwise disposed of and the weight of each, shall for each offense forfeit not less than twenty-five nor more than one hundred dollars." (Laws 1878, chap. 224, or 1494a, R. S. of 1898.)

This is an act to secure cleanliness in milk dairies, and gives the dairy and food commissioner, or his agent, full access and egress to all premises, buildings, or dairies where milk is stored, produced or handled for the city milk trade, and he is empowered to enforce such measures as may be necessary to prevent the sale of milk from diseased cows, or from cows fed on unwholesome food, and to require cleanliness in all barns, stables, milk houses or buildings where milk is produced or stored for the city milk trade.

"Any person or persons owning or managing a dairy, the product of which is sold as milk for family use, shall feed his cows upon wholesome food; keep them, when housed, in clean and comfortable stables, and handle the milk with clean utensils." (Laws 1897, chap. 94.)

The dairy and food commissioner shall be appointed by the Governor. He is authorized to appoint an assistant, expert in dairy matters and a practical analytical chemist, and an agent for the inspection of milk dairies, factories and creameries, and to assist in the work of the dairy and food commissioner. (Laws 1897, chap. 228, and pt. chap. 355.)

It is unlawful for any "person by himself or agent to sell, exchange or deliver, or expose for sale, or offer for sale, renovated butter, or butter which has been melted and its rancidity removed or masked, and which has been regranulated, colored and prepared in imitation or in semblance of genuine creamery butter, unless the substance be marked distinctly, on the outside of each and every package or parcel thereof by a label printed with the words 'Renovated Butter,' and without having, on each and every open tub, package or parcel thereof a placard with the words 'Renovated Butter,' such placard or brand in each case to be

printed in plain, uncondensed Gothic capitals not less than one inch long, and such placard shall contain no other words thereon." (Laws 1899, chap. 76.)

The offering for sale, selling, shipping or consigning cheese labeled with a false brand or label, as to the quality of the article, is prohibited.

"The State dairy and food commissioner is hereby authorized and directed to issue to the cheese manufactories of the State, upon proper application therefor, and under such regulations as to the custody and use thereof as he may prescribe, a uniform stencil brand bearing a suitable device or motto and the words 'Wisconsin Full Cream Cheese.'"

"Every brand issued shall be used upon the side of the cheese or the bandage thereof, also upon the package containing the same, and shall bear a different number for each separate manufactory, and the commissioner shall keep a book in which shall be registered the name, location and number of each manufactory using the said brand, and the name or names of the persons at each manufactory, authorized to use the same."

"It shall be unlawful to use or permit such brand to be used upon any other than full cream cheese, or package containing the same."

It is required that the words "Wisconsin Skimmed Cheese" shall be distinctly and durably stamped upon each and every cheese and upon the box of any skimmed cheese manufactured at any cheese factory in the State, and all cheese not manufactured as is prescribed in the preceding sections of this act shall be deemed to be skimmed cheese. (Laws 1893, chap. 228.)

The manufacturing, buying, selling, offering, shipping, consigning, exposing or having in possession for sale, by any person or his agent, any cheese manufactured from skim milk, to which has been added fat which is foreign to such milk, or manufactures, buys, sells, etc., within this State, any skimmed milk cheese or cheese manufactured from milk from which any of the fat origi-

nally contained therein has been removed, except such last mentioned cheese is ten inches in diameter and nine inches in height, or rendering or manufacturing, selling, shipping, etc., any article, product or compound made wholly or partly out of any fat, oil or oleaginous substance or compound thereof not produced from unadulterated milk or cream from the same, and without the admixture or addition of any fat foreign to said milk or cream, which shall be in imitation of yellow butter produced from such milk or cream, with or without coloring matter, is prohibited. The manufacture or sale of oleomargarine is permitted in a separate and distinct form, and in such manner as will advise the consumer of its real character, and free from coloration or ingredient that causes it to look like butter. (Laws 1895, chap. 30.)

"Any person who shall sell or offer for sale to any person who asks, sends or inquires for butter any oleomargarine, butterine, or any similar substances made in imitation or semblance of pure butter, not made entirely from the milk of cows, with or without coloring matter, or who shall expose for sale oleomargarine, butterine, or any similar substance not marked and distinguished on the outside of each tub, package or parcel thereof by a placard with the word 'oleomargarine,' and not having also upon every open tub, package or parcel thereof a placard with the word 'oleomargarine,' or who shall sell oleomargarine, butterine or any similar substance from any dwelling, store, etc., without having posted thereon the placard or sign, 'oleomargarine sold here' or 'butterine sold here,' said placard or sign to be approved by the dairy and food commissioner of this State; or who shall sell or deliver from any cart, wagon or other vehicle upon the public streets or ways, oleomargarine, butterine or any similar substance, without having on the outside of both sides of said cart, wagon or other vehicle a placard, with the words, 'licensed to sell oleomargarine,' or who shall furnish or cause to be furnished in any hotel, boarding-house, etc., oleomargarine, etc., to any guest or patron thereof without first notifying such guest or

patron that the substance so furnished is not butter, shall be punished. (Laws 1895, chap. 30, secs. 4-9.)

It is unlawful for any person to knowingly or negligently buy or procure for use as food in any of the charitable, correctional or penal institutions of this State any butter or cheese not made wholly and directly from pure milk or cream, salt and harmless coloring matter, and the violator of this section is liable to punishment by fine or imprisonment or both. (Chap. 189, Laws 1897.)

" The Governor may authorize the commissioner or his assistants, when not engaged in the performance of other official duties, to give such aid in farmers' institutes, dairy and farmers' conventions and the agricultural department of the State University as may be deemed advisable. (Sec. 1410-d, R. S. 1898.)

The adulteration of food and drugs is prohibited. The term drug as used in this act is defined, as is also the term food, which shall include all articles used for food or drink by man, whether simple, mixed or compound.

" In the case of food: First, if any substance or substances have been mixed with it, so as to lower or depreciate, or injuriously affect its strength, quality or purity; second, if any inferior or cheaper substance or substances have been substituted wholly or in part for it; third, if any valuable or necessary ingredient has been wholly or in part abstracted from it; fourth, if it is an imitation of, or is sold under the name of another article; fifth, if it consists wholly, or in part, of a diseased, infected, decomposed, putrid, tainted or rotten animal or vegetable substance or article, whether manufactured or not; sixth, if it is colored, coated, polished or powdered, whereby damage or inferiority is concealed, or if by any means it is made to appear better or of greater value than it really is; seventh, if it contains any added substance or ingredient which is poisonous, injurious or deleterious to health, or any deleterious substance not a necessary ingredient in its manufacture; provided, that the provisions of this act shall not apply to mixtures or compounds recognized as ordinary articles of food,

if the same be distinctly labeled as mixtures or compounds, and from which no necessary ingredient in its preparation is eliminated."

Canned goods, with the exception of goods brought from foreign counties, exposed or offered for sale or exchange, must be distinctly labeled with the grade and quality of the same, together with the name and address of the person, firm or corporation packing, canning or procuring the same, or the dealer who sells the same. (Chap. 166, Laws of 1897.)

"Any person who shall knowingly sell any kind of diseased, corrupted or unwholesome provisions, whether for meat or drink, without making the same fully known to the buyer, shall be punished." (Chap. 171, R. S. 1858.)

WYOMING.

It is unlawful to adulterate or dilute any article of food, drink, etc., with a fraudulent intent to offer the same for sale or to cause or permit the same to be offered for sale as unadulterated and undiluted, or to fraudulently sell or keep or offer for sale as aforesaid, and the offender shall be punished by a fine. (Sec. 510-g, R. S. 1899.)

CANADA.

No person shall sell or supply any milk diluted with water, or in any way adulterated, or milk from which any cream has been taken, or skimmed milk or milk that has become tainted or partly sour from want of proper care in keeping clean all vessels in which milk is kept.

Provided, that skimmed milk may be sold if the customer is advised. (R. S. O., 1897, chap. 252.)

All milk containing less than thirteen per cent. of total solids, of which three and three-quarters per cent. must be chemically dry

butter fat, shall be deemed below the standard required in creameries for butter manufacture.

It shall be lawful for the owner or manager of a cheese or butter factory to require the owner of any cows, whose milk is supplied to the factory, to submit his cows to such milk test as may be necessary to ascertain the quantity and the quality of the milk of such cows.

No person shall sell or supply to a cheese or butter factory to be manufactured, milk diluted with water, or in any way adulterated, or milk from which cream has been taken without notifying the manufacturer that the milk has been so diluted or adulterated.

Any manufacturer who knowingly uses for his own benefit, any cream from milk brought to a factory without the consent of all the owners, shall be fined. (R. S. O., 1897, chap. 251.)

Vinegar Laws.

In some States specific laws have been enacted to regulate the manufacture and sale of vinegar; in others the general laws forbid the adulteration of vinegar.

CONNECTICUT.

No person shall make for sale or sell, as vinegar, any vinegar not produced wholly from the juice of apples, or add to any vinegar, any drug, foreign substance, coloring matter or acid.

No person shall sell or make for sale any vinegar not having an acidity equal to not less than four per centum, by weight, of absolute acetic acid, and in case of cider vinegar, not less than two per centum, by weight, of cider vinegar solids, upon full evaporation over boiling water.

No maker shall sell vinegar without branding or marking each barrel, cask, keg or package, with the name of the maker, residence, or place of manufacture, the true name of the kind of vinegar, as "cider vinegar," "wine vinegar," "malt vinegar," or "wood acid vinegar." This clause shall not apply to retail sales in lots of less than five gallons at place of manufacture.

No person shall sell or offer for sale or receive any order for delivery within the State; first, any vinegar as cider vinegar not wholly produced from the juice of apples; second, vinegar to which has been added any foreign substance, drug or acid; third, any vinegar containing less acetic acid than before named; fourth, any barrel or receptacle not properly branded or marked. (Laws 1897, chap. 67.)

DISTRICT OF COLUMBIA.

Section 3b of the laws of the United States, with reference to the adulteration of foods and drugs in the District of Columbia, defines what is deemed adulterated as follows:

"Thirteenth.— In the case of all kinds of vinegars, if it contains an acidity equivalent to the presence of less than four per centum of absolute acetic acid; and cider vinegar, if it is not made from the pure apple juice, and contains less than one and five-tenths per centum of total solids."

The health officer of the District of Columbia, under the direction of the commissioner of said District, is charged with the enforcement of the law. (Chap. 25, Laws of 1898.)

IDAHO.

It is unlawful to "manufacture for sale, or knowingly offer for sale, or have in possession with intent to sell, any vinegar found upon proper test to contain any preparation of lead, copper, sulphuric acid or other ingredient injurious to health."

The selling, exchanging, delivering, or having in possession with intent to sell or exchange, expose or offer for sale or exchange, of any adulterated vinegar or any vinegar not in compliance with the provisions of this act is prohibited, as is also the labeling, branding or selling as cider vinegar, or as apple vinegar any vinegar not the legitimate product of pure apple juice, or not made exclusively from apple cider.

"Manufacturers of vinegar, in the State of Idaho, and persons who reduce or rebarrel vinegar in this State, and all persons who handle vinegar in lots of one barrel or more, are hereby required to have stenciled or marked in black letters and figures at least one inch in length on the head of each barrel or package of vinegar bought or sold by them, the kind (cider, malt, grain or wine, etc.) and the standard strength of the vinegar contained in the package

or barrel, which shall be denoted by the per cent. of acetic acid. All vinegar, except cider, shall have an acidity equivalent to the presence of not less than four and one-half per cent. by weight, of absolute acetic acid, and in case of cider vinegar it shall contain not less than two per cent., by weight, of cider vinegar solids upon full evaporation over boiling water."

" Retailers who sell vinegar by the gallon and shall reduce by water or other mixtures the strength of vinegar purchased and sold by them," are required to mark in plain figures on said package, or barrel, the strength of the vinegar still contained in said package or barrel. (Laws 1899, p. 368.)

ILLINOIS.

Vinegar, apple or cider, must be the product of pure apple juice, and must contain not less than one and three-fourths per cent. by weight of cider vinegar solids upon full evaporation at the temperature of boiling water.

Fruit vinegars are to be branded. All vinegar made from distilled liquors shall be branded " distilled vinegar." All fermented vinegar not distilled shall contain not less than one and one-fourth per cent. by weight upon full evaporation (at the temperature of boiling water) of fruit solids, and not less than two and a half tenths of one per cent. ash or mineral matter. Fruit or grain vinegar shall contain no foreign substance and shall contain not less than four per cent. by weight of absolute acetic acid.

The sale of vinegar containing injurious ingredients is prohibited, and packages containing vinegar are to be marked with the name of the manufacturer or dealer, together with brand. (Laws 1883, p. 176.)

INDIANA.

This is an act to prevent the adulteration of vinegar, fix standard, etc.

The manufacture and sale of vinegar as cider vinegar, which is not made from the product of pure apple juice, and the adulteration of vinegar by the introduction of foreign substances, etc., is prohibited, as is also the use of ingredients injurious to health.

It is unlawful to have in possession with intent to sell, any adulterated vinegar, or to label, brand or sell as cider vinegar, any vinegar which is not the product of pure apple juice.

All vinegars shall be without artificial coloring matter and shall have an acidity equivalent to the presence of not less than four per cent. by weight of absolute acetic acid, and in the case of cider vinegar, shall contain in addition not less than two per cent. by weight of cider vinegar solids upon full evaporation over boiling water.

"All vinegars, not cider or fruit vinegar, shall be without artificial coloring, nor shall they be mixed with cider or fruit vinegars, or in any manner changed to imitate a cider or fruit vinegar."

The violation of the provisions as aforesaid, of the law, is made a misdemeanor.

Manufacturers of cider vinegar, other than domestic manufacturers, are required to brand on each head of the cask, barrel or keg containing such vinegar, the name and residence of the manufacturer, the date when the same was made, and the words "cider vinegar," and vinegar branded "fruit vinegar" must be made wholly from apples, grapes or other fruit. (Laws 1889, chap. 70.)

KANSAS.

Every person who manufactures for sale or offers for sale as cider vinegar, any vinegar not the product of pure apple juice, or vinegar not made exclusively of apple cider, or vinegar into which any deleterious substances, drugs or acids have been introduced, shall be fined not less than fifty dollars. (Laws 1891, chap. 1.)

Every person who manufactures for sale or offers for sale any vinegar which contains any preparation of lead, copper or sulphuric acid, shall be fined.

The provisions in the foregoing sections shall also apply to all preparations of vegetables, fruits and other products in which vinegar is one of the principal ingredients.

Every manufacturer shall brand receptacles "cider vinegar"; any person who brands any receptacle cider vinegar that does not contain pure cider vinegar shall be fined. (Laws 1891, chap. 1.)

KENTUCKY.

All kegs or packages in which vinegar is placed and offered for sale shall be labeled or marked so as to describe the process of manufacture of the contents and state of what material the vinegar is made; whether from fruit by natural fermentation or from malt, grain or acid. Any person selling or offering vinegar not so marked or which does not correspond and is not as represented by the label, shall be fined. (Laws 1894, sec. 1282.)

MAINE.

This is an act additional to section 1 of chapter 128 of the Revised Statutes, to regulate the manufacture and sale of vinegar.

The manufacturing for sale, knowingly offering or exposing for sale, or knowingly causing to be branded or marked as cider vinegar, any vinegar not the legitimate product of pure apple juice, but into which any foreign substances, ingredients, etc., has been introduced, is prohibited, as is also the use of ingredients injurious to health, and penalties are attached for the violation of this act.

Inspectors of vinegar may annually be appointed for their respective places by the mayor and aldermen of cities, and selectmen of towns. (Laws 1881, chap. 6.)

MASSACHUSETTS.

The selling or offering to sell or having in possession with intent to sell any adulterated vinegar as cider vinegar, not the product of pure apple juice is prohibited. (Laws 1884, chap. 307.)

"All vinegars shall be without artificial coloring matter, and shall have an acidity equivalent to not less than four and one-half per cent. by weight of absolute acetic acid, and in the case of cider vinegar shall contain in addition not less than two per cent. by weight of cider vinegar solids upon full evaporation over boiling water; and if any vinegar contains any artificial coloring matter, or less than the above amount of acidity, or in the case of cider vinegar, if it contains less than the above amount of acidity, or of cider vinegar solids, it shall be deemed to be adulterated." (Laws 1885, chap. 152.)

MICHIGAN.

No vinegar shall be sold as apple or cider vinegar which is not the product of pure apple juice and shall contain not less than one and three-fourths per cent. by weight of cider vinegar solids. (C. L. 5003.)

All vinegar made by fermentation and oxidation, without the aid of distillation shall be branded "fermented vinegar," with the name of fruit or substances from which it is made, and all vinegar made wholly or in part from distilled liquor shall be branded "distilled vinegar" and all such vinegar shall be free from coloring matter other than that imparted by distillation, and all fermented vinegar not distilled shall contain not less than one and three-fourths per cent. by weight, of solids contained in the fruit or grain from which said vinegar was fermented, and said vinegar shall contain not less than two and a half tenths of one per cent. ash or mineral matter, the same being the product of the material from which said vinegar is manufactured, and all

vinegar shall be made wholly from the fruit or grain from which it purports to be or is represented to be made and shall contain not less than four per cent. by weight of absolute acetic acid. (C. L. 5004.)

No person shall manufacture, sell or offer for sale any vinegar found to contain any preparation of lead, copper, sulphuric or other mineral acid or other ingredients injurious to health, and all packages shall be branded with the name and residence of the manufacturer in addition to the requirements in foregoing paragraphs. (C. L. 5005.)

MINNESOTA.

It is unlawful to manufacture or offer for sale any vinegar found upon analysis to contain any preparation of lead, copper, sulphuric acid or other injurious ingredients.

All vinegar shall have an acidity of not less than four and one-half per cent. by weight of acetic acid, and in case of cider vinegar, shall contain in addition not less than two per cent. of cider vinegar solids.

All persons who deal in vinegar in lots of one barred or more must stencil each receptacle with name and the standard strength of the vinegar, which shall be denoted by the number of grains of pure bicarbonate of potash required to neutralize one fluid ounce of vinegar. (Laws 1891, chap. 119.)

MISSOURI.

Vinegar shall not be sold as cider vinegar unless it is the product of apples, and shall not be adulterated.

No vinegar shall be branded "fruit vinegar" unless made wholly from apples, grapes or other fruits. (R. S. 2282-2284.)

NEBRASKA.

The sale of vinegar as apple, orchard, or cider vinegar, not the legitimate product of pure apple juice, known as apple cider or vinegar, not made exclusively of said apple cider, or vinegar into which foreign substances, drugs or acids have been introduced, which, upon proper test, contains less than two per cent. by weight of cider vinegar solids, upon full evaporation at the temperature of boiling water, is prohibited.

Manufacturers or producers of cider vinegar when offering it for sale are required to plainly mark or brand on the head of each cask, barrel, keg, or other package containing such vinegar their name and place of business and the words "cider vinegar," and no person shall label or brand as cider vinegar or for cider vinegar any package containing vinegar which is not cider vinegar.

The manufacturer of, or dealer in, the so-called grain vinegar, wine vinegar, or fruit vinegar, shall place them on the market without artificial coloring, with a brand or label on each barrel, cask or other package clearly indicating the name and place of business of the manufacturing firm or company, with the name of the grain or fruit from which the contents are made.

"All vinegar shall be made wholly from the fruit or grain from which it purports to be or is represented to be made and shall contain no foreign substance or artificial coloring, and shall contain not less than four per cent. by weight of absolute acetic acid."

The manufacturing for sale, offering for sale, or having in possession with intent to sell, any vinegar containing any preparation of lead, copper, sulphuric, or other mineral acid or any ingredients injurious to health is prohibited. (Laws 1897, chap. 4.)

NEW JERSEY.

The first and second sections of this act prescribe penalties for the manufacturing or selling as cider vinegar any vinegar not

made of pure apple juice, and for manufacturing or selling vinegar containing ingredients injurious to health. The third section refers to the appointment of inspectors of vinegar and specifies their powers, duties, etc. The fourth section prohibits the selling, exchanging, delivering or having in possession with intent to sell, etc., any adulterated vinegar or label, brand or sell as cider vinegar or as apple vinegar any vinegar that is not so.

Section 5 fixes the standard for vinegar and reads as follows:

"That all vinegars shall be without artificial coloring matter, and shall have an acidity equivalent to the presence of not less than four and one-half per centum, by weight, of absolute acetic acid, and in the case of cider vinegar, shall contain in addition not less than two per centum by weight, of cider vinegar solids upon full evaporation over boiling water; and if any vinegar contains any artificial coloring matter or less than the above amount of acidity, or in the case of cider vinegar, if it contains less than the above amount of acidity or of cider vinegar solids, it shall be deemed to be adulterated within the meaning of this act."

Section 6 requires that all casks, barrels, or kegs containing vinegar as aforesaid shall be branded by the manufacturer with his name, residence, the date of manufacture and the words "cider vinegar." (P. L. 1888, p. 349, or G. S., p. 3744.)

NEW YORK.

See Laws of New York in this report.

OHIO.

No vinegar shall be sold as apple, orchard or cider vinegar which is not the legitimate product of pure apple juice, known as apple cider; or any vinegar not made exclusively of said apple cider; or vinegar into which any foreign substance, drugs or acids

have been introduced as may appear upon proper tests, which tests must show not less than two per cent. by weight of cider vinegar solids on full evaporation.

All vinegar made by fermentation and oxidation without the intervention of distillation shall be branded " fermented vinegar," with the name of the fruit or substance from which it is made. And all vinegar made wholly or in part from distilled liquor shall be branded " distilled vinegar " and all such distilled vinegar shall be free from coloring matter.

Fermented vinegar shall contain not less than two per centum by weight upon full evaporation of solids, contained in the fruit or grain from which said vinegar is fermented, and said vinegar shall contain not less than two and one-half tenths of one per cent. ash or mineral matter, and all vinegar shall be made wholly from the fruit or grain from which it is purported to be made, and shall contain no foreign substance, and shall contain not less than four per centum of absolute acetic acid.

No person shall manufacture, sell or offer for sale any vinegar found to contain any preparation of lead, copper, sulphuric or other mineral acid.

All packages or barrels shall be branded with the name and place of manufacturer, together with the name of contents of said barrel, and no barrel shall be branded " fruit vinegar " unless the same is made wholly from apples, grapes or other fruits. (O. S. 4200-4250-4254.)

PENNSYLVANIA.

No person shall manufacture, sell or offer for sale any vinegar not in compliance with this act, and no vinegar shall be sold as apple or cider vinegar which is not the product of pure apple juice or vinegar in which foreign substances, drugs or acids have been introduced.

Cider vinegar shall contain not less than an acidity of four per centum and one and one-half per centum by weight of cider

vinegar solids. No vinegar shall be branded "fruit vinegar" unless the same shall be made wholly from grapes, apples or other fruits.

Vinegar made by fermentation and oxidation, without the intervention of distillation shall be branded "fermented vinegar" with the name of the fruit or substance from which it is made, and all vinegar made wholly or in part from distilled liquor shall be branded "distilled vinegar," and it shall be free from coloring matter.

Fermented vinegar shall contain not less than one and one-half per cent. by weight of solids derived from the fruit or grain from which it is made. And all vinegar shall be made wholly from the fruit or grain from which it is represented to be made and shall contain no foreign substance, and shall contain not less than four per centum by weight of absolute acetic acid. Spices may be added to vinegar if they do not color it.

No vinegar shall contain any preparation of lead, copper, sulphuric or other mineral acid or other ingredients injurious to health.

All barrels or receptacles shall be branded with the name of the manufacturer, place of manufacture and the name of the grade or kind of vinegar contained therein. (Laws 1897, No. 140.)

RHODE ISLAND.

The sale of adulterated vinegar as cider vinegar is prohibited.

All vinegars shall be without artificial coloring matter and shall have an acidity of four and one-half per centum of acetic acid, and in the case of cider vinegar, shall contain in addition not less than two per centum of cider vinegar solids.

If any vinegar contains coloring matter or less than above acidity and solids it shall be deemed adulterated.

Inspectors of milk, or such officer as the town council may appoint shall make complaint for all violations. The inspector of

vinegar shall receive not over twenty-five cents per barrel for inspection, to be paid by the person having the inspection made. (R. S. 1896, chap. 148.)

SOUTH DAKOTA.

The manufacture, sale and offering for sale of vinegar as cider vinegar not made exclusively of apple cider, or vinegar into which any foreign substance, drugs or acids have been introduced is prohibited, as is also the use of any preparation of lead, copper, sulphuric acid, or other injurious ingredients.

All vinegar shall have an acidity of four and one-half per cent. of acetic acid, and in the case of cider vinegar shall contain not less than two per cent. by weight of cider vinegar solids upon full evaporation over boiling water.

All manufacturers of vinegar and all persons who rebarrel vinegar shall brand each package with name of manufacturer, the location of the factory, and the standard strength of the contents, which latter shall be denoted by the number of grains of pure bicarbonate of potash required to neutralize one fluid ounce of vinegar. (Laws 1899, chap. 89.)

UTAH.

No person shall sell or have in possession to sell any adulterated vinegar or any vinegar not in compliance with the provisions of this act.

All manufacturers of vinegar, and all persons who reduce or rebarrel vinegar, and all persons who handle vinegar in lots of one barrel or more, are hereby to have stenciled on the head of each barrel or package bought or sold by them, the name of the manufacturer and place, the kind of vinegar, cider, malt, grain or wine, and the standard of strength shall be denoted by the per cent. of acetic acid. All vinegar, except cider, shall have an acid-

ity equal to four and one-half per cent. of absolute acetic acid, and cider vinegar shall contain not less than two per cent. of cider vinegar solids.

The possession of vinegar barrels shall be *prima facie* evidence of having same for sale. (Laws 1899, chap. 63.)

VIRGINIA.

No person shall manufacture, produce, sell or expose for sale any vinegar which shall not have an acidity equivalent to at least four and one-half per centum by weight of acetic acid, or any cider vinegar with less than four and one-half per centum of acetic acid, or less than two per centum by weight of cider vinegar solids.

No vinegar shall be made or sold for cider vinegar which is not cider vinegar.

No vinegar shall be made or sold or offered for sale that shall contain any preparation of copper, lead, sulphuric acid or other ingredient injurious to health, or any coloring matter.

Manufacturers of cider vinegar must brand each barrel or cask with the words "cider vinegar" and no person shall label a cask "cider vinegar" that is not cider vinegar.

"Cider vinegar" shall be understood to mean vinegar made exclusively of pure apple juice. (Laws 1890, No. 44.)

WISCONSIN.

Any person who manufactures for sale or offers or exposes for sale as cider vinegar any vinegar which is not the sole product of pure apple juice, known as apple cider, or vinegar not made exclusively of said cider, or vinegar into which foreign substances, drugs or acids have been introduced, or which contains any preparation of lead, copper, sulphuric acid, artificial coloring matter or

other ingredients injurious to health, or who by himself or agent shall sell, exchange, etc., any adulterated vinegar, or shall label, brand or sell as cider or apple vinegar any vinegar which shall not have an acidity equivalent to the presence of not less than four per centum by weight of absolute acetic acid, and in addition in the case of cider vinegar, not less than two per centum by weight of cider vinegar solids upon full evaporation over boiling water at two hundred and twelve degrees Fahrenheit, and any manufacturer of vinegar in this State who reduces or rebarrels vinegar therein, or who handles vinegar in quantities of one barrel or more, who shall fail to stencil or otherwise mark on the head of each barrel or package of such vinegar bought or sold by him the standard strength of the vinegar contained in such barrel or package, which shall be denoted by the per centum of acetic acid therein, or who shall falsely mark such barrel or package, shall be punished. (Laws 1891, chap. 394.)

Diseases of Domestic Animals.

Nearly all the States and territories have established commissions or boards for the suppression of contagious and infectious diseases among domestic animals. These laws aim to protect the owners and to prevent the consumption of unwholesome animal products.

The National Bureau of Animal Industry, working in co-operation with the States, has done much to promote effective results.

A reference to the following table will show the *number* of domestic farm animals in the United States and in the State of New York in 1900:

	United States.	New York.
Horses	13,537,524	590,771
Mules	2,086,027	3,714
Cattle	27,610,054	572,299
Milch cows	16,292,360	1,487,416
Sheep	41,833,065	846,165
Swine	57,409,583	650,000
Value	$2,042,650,812	$109,022,307

The following abstract of the Laws of the United States and of the several States and territories will give some idea of the requirements of each, omitting methods of prosecution and penalties.

For full text of the laws, see references at the end of each paragraph.

UNITED STATES.

The government of the United States established a bureau of animal industry in 1884, and placed the enforcement of various laws in the hands of the United States Commissioner of Agricul-

ture — now the Secretary of Agriculture — and authorized him to issue rules and regulations to govern about every feature of animal industry throughout the United States, to cover export and import and interstate traffic in live animals and all animal products, and especially for the suppression and extirpation of contagious and infectious diseases. The active co-operation of this bureau with the authorities of the several States, governed by such rules as may be issued by the Secretary of Agriculture from time to time, as the exigencies of the case may demand, have made voluminous and ever-changing methods of work in the large field covered by this subject.

The first rule emanating from the United States Commissioner of Agriculture was in July, 1885, and may be found, together with much further information, in the Fourteenth Annual Report of the Bureau of Animal Industry, 1897.

Reference is also made to the subsequent reports of this bureau.

ALABAMA.

It is unlawful and made a misdemeanor for any person to allow a dog or dogs which belong to him or over which he has control, which become rabid, or a dog which he has information of or good reason to believe has been bitten by a rabid dog, to run at large in the State. (Laws 1895, No. 373.)

ALASKA.

The territory of Alaska is subject to the Laws of the United States, to which reference is hereby made.

ARIZONA.

The Live Stock Sanitary Commission shall have power to appoint live-stock inspectors to reside in or near each city, town or village or at any point where cattle are slaughtered, and it shall

be their duty to supervise the slaughtering and keep records of brands to show proof of ownership, etc. (Laws 1895.)

The governor shall appoint three persons to constitute the live stock sanitary commissioners of the territory. He and they shall appoint a veterinary surgeon.

It shall be the duty of every person who has reason to believe any domestic animals are affected with any contagious or infectious disease to notify the commission. It shall be the duty of the commission to protect the health of domestic animals from all contagious or infectious diseases of a malignant character, and to this end they shall maintain, and enforce such quarantine, sanitary, or other regulations as they may deem necessary.

Detailed methods of proceeding are given, for the condemnation and destruction of diseased animals.

The governor may prohibit the importation of animals from districts infested with dangerous cattle diseases.

The commission shall devise a system of inspection of all stock exported from the territory. (Laws 1895, March 21.)

Sheep inspectors are provided for each county and are to prevent the spread and introduction of diseases among sheep.

The laws of this territory seem to embrace about every possible feature of the cattle and sheep business, having been revised to a late date. (Laws 1897, March 1.)

ARKANSAS.

The importation of any diseased horse, mule, jack or jennet affected by nasal gleet, glanders, farcy, or any other contagious or infectious disease is prohibited, as is also the driving on a highway or selling any such animal.

No person shall bring into the State any western horses, mules or jacks which have not been kept at least twelve months north of the north boundary of Missouri, or twelve months, east of the west boundary line of Iowa; provided nothing shall prevent trans-

portation through the State, or the driving across the State, between April first and the tenth of July.

This act shall not apply to settlers bringing their horses with them.

The commissioner of mines, manufactures and agriculture is authorized to extend or limit the operation of this act when the importation of horses, mules or jacks may transmit contagious diseases or not. (L. 1897, Feb. 5.)

Cattle may not be driven across the quarantine lines established by the United States government authorities. (Laws 1895, April 19.)

CALIFORNIA.

No person shall sell or offer for sale, or bring within the State any domestic animal, knowing the same to be affected with any contagious or infectious disease; every animal having glanders or farcy shall at once be killed by the owner or person having charge thereof. (Laws 1891, chap. 402.)

No animal affected with contagious or infectious disease shall be driven on the highways or permitted to run with healthy animals. (Laws 1893, chap. 219.)

The duty of the State veterinarian shall be to protect the health of all domestic animals, so far as possible, from all contagious and infectious diseases; he may make quarantine and sanitary regulations and issue certificates of inspection. Contagious and infectious diseases shall be reported to the State dairy bureau and the board of supervisors, who shall prevent the spread of such diseases. Disinfection shall be done in accordance with the rules of the United States bureau of animal industry. (Laws 1899, chap. 96.)

COLORADO.

Any domestic animal found diseased and unfit for food may be killed by any officer of the board of health. (Laws 1893, p. 391.)

No diseased animal, and no animal exposed to contagious disease shall run at large, or be sold, driven, or offered for sale, or brought into the State. (Laws 1893, p. 391.)

It is unlawful to dock horses' tails or to possess them without registry. (Laws 1897, chap. 93.)

CONNECTICUT.

The State Board of Agriculture, for the purpose of preventing spread of pleuro-pneumonia, tuberculosis, or other contagious diseases, among domestic animals, may prohibit the introduction of any such animal into the State, prohibit sale of milk or meat from exposed animals, maintain quarantine and make regulations for control and extirpation of disease, but tuberculin or similar substance shall not be used, except with the written consent of owner.

No animal shall be paid for unless owned in the State for three months prior to condemnation.

All veterinary practitioners shall report cases of contagious diseases of animals to State Board of Agriculture. (Laws 1895, chap. 288.)

This act, in relation to domestic animals, provides, in section 1, for a notification, by any person bringing cattle from an adjoining State into this State, to the commissioner on domestic animals, within ten days thereafter, and such notice shall contain the number and sex of such animals and a true statement of their physical condition.

In section 2 the commissioner is authorized to quarantine all animals infected with contagious diseases, and prohibit the sale of all the products thereof, but no animal is to be quarantined for more than thirty days.

In section 3 provision is made for the killing of diseased animals and payment for the same to the owner, after the value thereof has been duly adjudged and determined. But no animal whose physical condition indicates that it is of no real value, or which

has not been in the State six months prior to its quarantine shall be paid for by the State.

Sec. 4. The commissioner shall, at the request of the owner of any domestic animal or animals in this State, inspect the same by physical examinations, and if he find them free from disease dangerous to public health he shall so certify to the owner.

Sec. 5. It shall be the duty of the selectmen in each town to report to the commissioner any animals infected with contagious disease.

Sec. 6. The governor is to appoint biannually a commissioner on domestic animals, who shall be a practical farmer and stock breeder of at least ten years' experience, for a term of two years, and he may employ all necessary assistants. (Laws 1897, chap. 119.)

This act provides for the examination by the duly appointed agents of the Connecticut Humane Society of any animals supposed to be infected with the disease known as glanders or farcy, under certain rules and regulations. The animals may be quarantined and killed, and provision is made for a determination as to the infection of the animals in case veterinarians disagree. The owner of any animal found to be infected with glanders or farcy shall disinfect the stalls or buildings in which said animal has been housed, and the harness used upon said animal. (Laws 1897, chap. 211.)

DELAWARE.

Beef cattle may be brought into this State under and subject to the following restriction. That all such cattle shall be taken directly from the cars on which they are transported to the abattoir, slaughter-houses or enclosure connected therewith, and kept therein until slaughtered. (Laws 1891, chap. 180.)

This act authorizes the governor of this State, when its citizens are threatened by an epidemic of contagious or infectious diseases among the lower animals, to issue his proclamation stating the fact,

and ordering precautions against the spread of such diseases. He may order animals detained for inspection. He may prescribe regulations for destroying animals and infectious objects, provided that no animal shall be destroyed unless first examined by a medical or veterinary practitioner in the employ of the governor. He may prescribe regulations for disinfection and take such further action as he may deem expedient. (Laws 1893, chap. 639.)

If any person, being the owner of any domestic animal which has died from anthrax, and who shall immediately after the death of any such animal cremate the carcass of the same, shall, within ten days, make the death of said animal known to the governor, he shall be paid by the State treasurer, for each animal that has so died the sum hereinafter mentioned, to-wit: In the case of horned cattle, horses and mules, the sum of eight dollars; in the case of swine, the sum of two dollars; in the case of sheep, the sum of one dollar; *Provided,* that the owner of said dead animal shall first secure a certificate of death of such animal by anthrax from the Delaware College Agricultural Experiment Station, or in such other manner as the governor may direct. (Laws 1897, chap. 451.)

That whenever the governor shall receive reliable information that the contagious disease known as anthrax exists, he is hereby authorized, at his discretion, upon the request of the owner of such domestic animals as are exposed to said contagious disease, to order the same vaccinated by skilled persons with Pasteur vaccine; *provided* the owner of said domestic animals assumes the risk of whatever losses may result therefrom. (Laws 1897, chap. 450.)

DISTRICT OF COLUMBIA.

Any animal affected by glanders or other contagious or pestilential disease, kept or remaining in any stable, is declared a nuisance to be abated.

All animals supposed to be infected with any infectious, contagious or communicable disease shall be reported to the chief of

the United States Bureau of Animal Industry, and he only may cause the death of any so diseased. Provision is made also for the appraisal of all animals killed. (Fourteenth Report Bureau Animal Industry, p. 445.)

FLORIDA.

It is unlawful for any person to bring into this State or to offer for sale therein any horses, mules, cattle, hogs, or other domestic animals, knowing at the time of such introduction or offering for sale of any such animals that they are suffering from diseases known as glanders, farcy, cholera, Texas fever or other virulent, contagious or infectious diseases. (Chap. 4351 [No. 30], p. 119, Laws 1895.)

Whenever hogs or sheep are butchered for market in this State, the head or heads of such hogs or sheep are to be brought to the market where such hogs or sheep are offered for sale. This shall not apply to hogs or sheep butchered and sold by retail in neighborhoods where there are no markets. (Laws 1893, p. 120.)

Any person or persons butchering a beef or beeves for market in this State, is required to take the hides to the nearest inspector. This does not interfere with the right of any individual to butcher for home use any of his own cattle. (Chap. 4187 [No. 73], p. 121, Laws 1893.)

This act has reference to the duties of the president and health officer of the State board of health, and it is provided that in the case of hydrophobia the State health officer or his authorized agent or agents is empowered to declare the infected point and animal or animals to be in quarantine, and to place any and all restrictions upon ingress and egress of animals or persons thereat, as in his judgment shall be necessary to prevent a spread of the disease from the infected locality, and it is made the duty of said State health officer, when he has declared any city, town or other place, or animals to be in quarantine, to so

control the population or animals of said city, town or other place, to make such disposition of the same as shall, in his judgment, best protect that population, and at the same time prevent a spread of the infection or running at large of animals infected with rabies among the same.

The State board of health is to have general supervision of the public health, and it shall have power to make, promulgate and enforce such rules and regulations as may be necessary for the preservation of the same, and to prevent the importation or spread of hydrophobia. (Chap. 4348 [No. 27], Laws of 1895.)

GEORGIA.

This act prohibits the driving, transferring or conveying of cattle into or through the counties of Rabun, Towns and Union, in this State, from any point south of the Blue Ridge, unless free from contagious or infectious disease or splenetic fever, and during the months of November, December, January and February of each year.

"Whenever cattle in either of said counties are found to be infected with any splenetic fever or contagious or infectious diseases, the ordinary of the county wherein such cattle are found shall, in writing, order the owner or the person in possession of said cattle to confine the same in limits to be prescribed in such order of said ordinary, and any person moving or causing to be removed such cattle, without first obtaining a permit in writing from said ordinary, shall be punished as prescribed in section 1039, vol. 3, of the Code of 1895."

Work cattle may be returned to this State during the months of November, December, January and February, and said cattle which have not been out of said territory longer than two weeks. (No. 332, p. 489, Laws 1899.)

This is an act to protect the cattle of this State from all contagious or infectious diseases, and authorizes and empowers the

commissioner of agriculture to establish, maintain and enforce quarantine lines, and make such rules and regulations as he may deem proper and necessary for the purpose of carrying into effect its provisions. It prohibits the driving of diseased cattle through this State, or cattle calculated to spread diseases.

The commissioner is to co-operate with the officials of other States and with the secretary of agriculture of the United States in establishing quarantine lines and such rules and regulations as he shall deem proper for the protection of the cattle of the State from said diseases. (No. 374, p. 97, Laws of 1899.)

IDAHO.

The State sheep inspector and his deputies shall inspect the sheep of the State and shall issue certificates of inspection if no contagious disease exists, but if any sheep are infected with scab or other contagious disease they shall be quarantined and treated by "dipping" as prescribed.

Such sheep may not be dipped between December and such time as they can be sheared, but they must be kept in quarantine and separate from sound sheep.

It is unlawful to drive any sheep into the State infected with scab or any contagious or infectious disease.

Penalties are imposed for selling, herding, moving or transporting diseased sheep or selling, herding or driving sheep, without showing certificates of inspection. (Laws 1899, pp. 352-358.)

"Whenever the governor of the State of Idaho has reason to believe that scab or any other infectious disease of sheep has become epidemic in certain localities in any other State or territory, or that conditions exist that render sheep likely to convey disease, he must thereupon by proclamation, designate such localities and prohibit the importation from them of any sheep into the State, except under such restrictions as, after consultation with the State sheep inspector, he may deem proper."

Any person or corporation who, after publication of such proclamation receives any sheep from any such prohibited district is liable to all consequent damages and heavy fines, and any sheep shipped into the State must not be driven on the highways or near other sheep until they have first been inspected. (Laws 1899, p. 452.)

INDIANA.

This is an act to prevent the spread of contagious diseases among swine, and makes it the duty of all railroad companies and all stock yard associations operating in this State to thoroughly cleanse and disinfect all cars in which hogs are shipped to their yards, immediately after unloading the hogs from the cars, and to keep their pens in which hogs are kept thoroughly cleansed and disinfected. And the manager of all fair grounds in the State, where swine are exhibited, shall thoroughly cleanse and disinfect and keep in such a condition all pens and all crates in which swine are brought to such fair, and they shall be cleansed and disinfected immediately upon their reception at said grounds. And the managers of such fairs shall, before receiving any such swine into such pens, require from the proposed exhibitor an affidavit that the swine presented for exhibition have not within the two months last past been exposed to any swine disease, and that he did, before shipping such swine, wash the same with a solution containing not less than one-tenth part of pure carbolic acid, and that the car in which such swine were shipped was thoroughly cleansed and disinfected before said swine were loaded in it.

"It shall be unlawful for any person to drive upon any public highway, or suffer to move at large or to ship in any vehicle or railroad car any swine, knowing the same to be infected with any disease, but the breeder or owner of any herd of swine, which becomes infected with any disease may, within five days after the first indication that such herd is so infected, separate and ship

and market all well and healthy hogs from such herd, and it shall be the duty of all breeders and owners of hogs in this State which die with any disease to burn each carcass to ashes within ten hours after death."

"It shall be unlawful for any one owning or controlling swine, knowing the same to be infected with disease, to allow such swine to have access to any stream of running water in this State, so that the water in such running stream to which such diseased swine have had access may flow down through the lands of others from where such infected herd is kept."

The manager of any railroad company or of any stock yards operating in this State or any manager of fair grounds, and any person driving, suffering to run at large or shipping such infected swine, and any breeder or owner of swine becoming infected with such disease who ships and markets the same, failing or refusing to comply with the provisions of this act, or if the owner or owners of any such hog or shoat dying with disease, or any person having the care and custody thereof having knowledge of the fact ten hours, fail, neglect or refuse compliance with the provisions of the preceding section, it shall be lawful for any person or persons to enter upon the premises after notifying the owner or owners of the same, where the carcass or carcasses of any hog or shoat may be, and burn the same without unnecessary damage, and for each carcass so burned he may recover the sum of one dollar from the owner of any such hog or shoat, or from any person or persons having charge of same, and any person who shall allow swine infected with any disease to have access to any stream of running water on his premises, then he and they, or any person or persons who shall violate any of the provisions of this act shall be deemed guilty of a misdemeanor." (Approved March 5, 1897.)

IOWA.

That it shall be the duty of the owner or person having charge of any swine or having knowledge of their dying, and upon its coming to his knowledge that any such swine have died of, or have been slaughtered on account of, any disease, to immediately burn or bury the same three feet below the surface.

The selling, giving away, or offering for sale, any swine that have died of any disease, or have been killed on account of any disease, is forbidden, and the conveying of any diseased swine as aforesaid upon any public highway or any private land, except that of the owner of the swine, is also forbidden, and the proof that any person has hauled, or is hauling dead swine from a neighborhood in which swine have been dying, or are at the time dying from any disease, shall be presumptive evidence of the fact.

"It shall be unlawful for any person negligently or wilfully to allow his hogs, or those under his control, afflicted with any disease, to escape his control or run at large." (Laws 1896, chap. 58, p. 59.)

The State Veterinary Surgeon shall have supervision of all contagious and infectious diseases among domestic animals, and is empowered to establish quarantine. When the public safety demands it, he may destroy diseased stock, and the owner shall receive compensation in actual value when condemned, but no compensation shall be allowed for stock in transit across the State.

Diseased sheep are to be under the care of a county sheep inspector and to prevent spread of scab, he may order owners to dip or otherwise treat them until such disease is eradicated.

Penalties are prescribed for bringing into the State any cattle in such condition as to infect other cattle with pleuro-pneumonia or Texas fever, and for horses, mules, etc., affected with nasal gleet, glanders or farcy, and no horses suffering from such diseases shall run at large. (Code, 1897.)

ILLINOIS.

This is an act to prevent the spread of contagious and infectious diseases among swine, and provides that no owner of, or having charge of swine shall suffer the same to run at large, fixes a penalty for each offense and defines the herding of swine under this act. It is made the duty of the owner or person having charge of any swine, having knowledge or reasonable grounds to suspect the existence among them of "hog cholera" or any contagious or infectious disease, to use all reasonable means to prevent the spread of the same, and if any such swine has died of, or been slaughtered on account of any such disease, to immediately burn, or bury, the same to a depth of two feet. Diseased swine or carcasses thereof are excluded from public highways. (Laws 1895, p. 6.)

It is unlawful to kill or cause to be killed for the purpose of sale any immature calf, or any calf less than four weeks old, or to knowingly sell or have in possession such calf with intent to sell it for food, and all such meat exposed for sale, or kept with intent to sell, may be seized and destroyed by any health officer or any sheriff, deputy sheriff, constable or police officer. (Criminal Code, R. S. 1899, chap. 38.)

"No person shall buy, sell, deal in or give away, or offer to buy, sell or deal in any swine that have died of any disease, or that have been killed on account of any disease." (Laws 1898, chap. 113.)

KANSAS.

It is the duty of a Live Stock Sanitary Commission to protect the health of domestic animals, to promulgate rules, establish and maintain quarantine and other sanitary regulations. Whenever the Governor shall have reason to believe dangerous, contagious or infectious diseases have become epidemic in other States, he may,

by proclamation, prohibit the importation of any live stock of the kind diseased into the State, unless accompanied by a certificate of health, given by an authorized inspector; said stock then shall come under the quarantine regulations of this State.

Stock yards are placed under special provisions. No diseased animal killed by order of the commission shall be paid for by the State. (Laws 1895, chap. 352.)

It is unlawful for any person to import or drive into this State sheep having any contagious disease, nor shall such sheep be permitted to run at large, neither shall they be sold without disclosing the fact to the purchaser.

County sheep inspectors shall require the owners of diseased sheep to treat them, but if the owner neglects to do so then the inspectors may treat them at the cost of the owners.

No person shall drive into or through any county any cattle diseased with Texas, splenetic or Spanish fever. It shall be the duty of the sheriff of any county to place any such diseased cattle in quarantine.

It is unlawful for any person to use, let, sell or permit to run at large any horse, mule or ass diseased with glanders. (Gen. Stat. 1899.)

KENTUCKY.

The State board of health shall suppress contagious and infectious diseases affecting cattle (Laws 1887, act 86) by warning all persons to seclude animals in their possession that are affected or exposed, and maintain quarantine at the owner's expense, and if necessary to disinfect or destroy diseased cattle to prevent the spread of contagion.

No cattle having pleuro-pneumonia shall knowingly be brought into the State or be driven in public highways, sold or transferred to another.

The State board may co-operate with the Federal government in the suppression of said disease. Said board shall pay no more than thirty dollars each for any cattle they order killed. (S. 1894, secs. 49-63.)

The county judge or justice of the peace is required, if it appears to his satisfaction that any animal within his county is diseased with glanders, to notify the owner and require him to kill and bury it; the value of the animal or animals is to be determined before being killed; the valuation not to exceed fifty dollars for any one animal, and the valuation and other facts are to be certified to the County Court. Provided, that if the animal is diseased with glanders, and the owner refuses to destroy the animal as is required, he shall be subject to a fine of not less than one hundred dollars, to be enforced by indictment. (Laws 1897, chap. 3.)

LOUISIANA.

Owners of all animals dying from epidemic, contagious or infectious diseases are required by this act, to cause the same to be burned or buried immediately after death, and any person who knowingly neglects or refuses to burn or cause to be burned the carcass of any animal dying as aforesaid shall be guilty of a misdemeanor.

The provisions of this act shall not apply to range stock. (Laws 1898, No. 98.)

The police juries of each parish are empowered to organize and act as a live-stock sanitary commission, with authority to enact and enforce regulations for the suppression of glanders, farcy, and other contagious diseases affecting live stock.

When public safety shall demand, such diseased animals shall be killed.

Diseased animals or those that have been exposed to contagious diseases shall not be brought into the State. (Laws 1894, approved July 12.)

MAINE.

The Governor shall appoint three commissioners, designated as the State of Maine Cattle Commission, who shall cause investigation as to the existence of tuberculosis, pleuro-pneumonia, foot and mouth disease, and any other infectious or contagious disease, establish and maintain quarantine, as they deem necessary, to prevent the spread of any such disease, appraise condemned animals and pay one-half the amount to the owners, not, however, to exceed one hundred dollars for pedigreed stock, or fifty dollars for others. No sum shall be paid unless the animals are owned in the State, and not then if any attempt is made to conceal the presence of disease. Regulations of the commission must be approved by the Governor and published. Penalties and method of procedure are given in this lengthy law. (Laws 1893, chap. 194; Laws 1897, chap. 311.)

MARYLAND.

"All hogs and other domestic animals dying of any contagious or infectious disease shall be buried at the depth of at least three feet, or be burned, at the discretion of the owner, and any person or persons permitting any dead hogs or any other domestic animals, having died of any contagious or infectious disease, to remain unburied upon his or their premises for the space of three hours, prior to sunset of said day, after he has discovered the same, shall be guilty of a misdemeanor." (Laws 1890, chap. 321.)

"It shall be unlawful for any person to sell any calf less than three weeks old to any butcher, or to any person to be butchered. Any person violating any of the provisions of this section shall be deemed guilty of a misdemeanor. (Laws 1900, chap. 672.)

MASSACHUSETTS.

The State board of health has charge of animals affected by glanders, farcy and rabies, and such diseases must be reported to them. (Laws 1897, chap. 178, and Laws 1899, chap. 293.)

A board of cattle commissioners was created the first of June, 1899, and they have power to make regulations concerning the extirpation, prevention and suppression of contagious diseases among domestic animals, or concerning the care and treatment or destruction of animals affected with, or which have been exposed to any contagious disease.

When a case of contagious disease is discovered and the board is convinced that the public good requires it, they shall cause its isolation, or the animal shall be at once killed, without appraisal or payment; if it shall subsequently appear, upon post-mortem examination, that such animal was free from the disease for which it was condemned, a reasonable sum shall be paid the owner not exceeding fifty dollars, and not then if, by wilful act or neglect, he contributed to the spread of tuberculosis.

Said board makes rules to conform to the regulations of the United States bureau of animal industry for the inspection of meat for export and interstate commerce.

When animals are transported within this State from places beyond its lines, which places the commissioners deem to be infected, such animals may be seized and quarantined at the expense of the owner, and if they deem it necessary to prevent the spread of contagion, they may cause such animals to be killed without appraisal or payment.

Provision is made for the appointment of inspectors by the commissioners, who shall make regular inspection of their towns or cities, grant certificates of health, and serve notice, of diseases found, on the owners, examine barns and stables with regard to cleanliness, light, ventilation and water supply, place diseased animals in quarantine and make full reports to the commissioners.

The use of tuberculin as a diagnostic agent for the detection of tuberculosis shall be restricted to cattle brought into the State, and to all cattle at Brighton, Watertown and Somerville, provided, however, that it may be used, by the consent of the owner in writing, or upon animals condemned to slaughter. (Laws 1899, chap. 408.)

MICHIGAN.

Three commissioners shall have power to use means to prevent the spread of dangerous diseases among animals, and protect people from use of diseased meat, and to place animals in quarantine and do whatever may be necessary to prevent the spread of contagious diseases among animals. (C. L. 4468.)

No animal shall be permitted to enter or pass through the State if capable of diffusing or communicating diseases. (C. L. 4469.)

The transportation and care of Texas cattle into and through the State are provided for in C. L. 5650-5654.

It is unlawful to drive sheep on a highway between the first days of May and November if infected with foot rot (C. L. 5655), and it shall be unlawful to import or drive into the State any sheep having any contagious disease. (C. L. 5657.)

MINNESOTA.

It is unlawful to "dock" horses' tails. (Laws 1899, chap. 68.)

No person shall convey upon or along any public highway, or elsewhere, any diseased swine, or sell or give away any that have died of disease. (Laws 1897, chap. 47.)

Authority is given to the State board of health and the local boards to take what steps they deem necessary to control, suppress and eradicate all contagious and infectious diseases among animals, to quarantine or kill as necessary, to prohibit arrival and departure of diseased animals, and enforce such regulations as they find best for the public health.

Cattle in this State shall not be adjudged infected with tuberculosis or condemned until such animal has been subjected to at least two separate tuberculin tests to ascertain such disease, and the time of making such separate tests shall be not less than two

or more than three months apart, and no milk shall be sold from such animals.

Provision is made for condemning supposed diseased animals to slaughter; should it be proven that the killed animal was free from disease, the owner shall be paid its appraised value, one-fifth by the town and four-fifths by the State.

Whenever animals are quaranttined on the premises of the owner, the cost shall be borne by him.

Conspicuous notices shall be posted at places of quarantine where diseased animals are kept. (Laws 1897, chap. 233.)

MISSISSIPPI.

Any animal suffering with glanders must be killed, and those exposed to the disease must be isolated and quarantined until all danger is past. (Laws 1896.)

MISSOURI.

No farm stock of any kind, being affected with any contagious disease, shall run at large on any highways or uninclosed lands. (R. S. 1889, sec. 351.)

No person shall import any horse, mule or ass affected with glanders or farcy, or suffer the same to run at large.

Cattle diseased with Texas fever, or hogs affected with cholera, shall not be brought into the State, sold or offered for sale.

Provision is made for disposing of carcasses of diseased animals and proper penalties are prescribed. (R. S. 2322-2328.)

MONTANA.

No person shall sell or offer for sale any horse, mule, or other animal having glanders, farcy, or any contagious disease, and owners must kill all such. (R. S. 700, 701.)

It is unlawful to allow any diseased animal to run at large, and affected animals must be confined six miles away from other stock. (R. S. 3063.)

Sheep affected with scab or other contagious disease must be separated and quarantined under instructions of inspectors. The Governor may, by proclamation, prevent the importation of sheep from sections where contagious diseases exist.

Stringent measures may be adopted for preventing the spread of contagious diseases among animals. (R. S. 3030-3046.)

There are many laws in this State, owing to its pastoral nature, regulating the herding and branding of animals. (R. S. 1163-1191.)

The Governor is authorized to appoint a State Live Stock Inspector, who shall investigate the nature, causes of and remedies for diseases of horses, mules, cattle, swine, sheep and other domestic animals, and shall go to localities where diseases are reported, and if satisfied that any live stock is infected with pleuro-pneumonia, tuberculosis, anthrax, glanders or any other contagious or infectious diseases, he shall report to the judge of the District Court, who shall order the sheriff to summon five freeholders, and if they believe that such disease exists the inspector shall order all diseased animals into quarantine, and close all creameries and dairies in the affected district. Stock dying from such diseases must be burned, not buried.

No stock from infected districts shall enter the State without a certificate showing good health. (R. S. 2045-2060.)

NEBRASKA.

It shall be unlawful for any person to sell, barter, or dispose of, or permit to run at large, any horses, cattle, sheep, or domestic animals, knowing that such horses, cattle, sheep or domestic animals are infected with contagious or infectious disease, or have been recently exposed thereto, unless he shall first duly inform the

person to whom he may sell, barter, or dispose of, such horses, cattle, sheep, or other domestic animals, of the same. (Laws 1899, chap. 98.)

The selling or buying, disposing of, or giving away, or receiving without charge, the carcasses of swine or other domestic animals dying from cholera or other diseases, for the purpose of being manufactured or rendered into lard or oil, or for any other purpose, is punishable by fine or imprisonment.

The hauling on the public highways of the carcasses of said animals is prohibited.

Manufacturers of soap are forbidden to buy or receive or possess the carcasses of such animals dying as aforesaid.

The owner of any premises upon which swine are kept, in which there is an outbreak of any contagious or infectious disease, is required to immediately quarantine said premises by posting and keeping so posted during the continuance of the said sickness or plague at least three placards, bearing the name of the supposed disease, one of which placards shall be posted at the entrance to said premises and the other two in the most conspicuous places thereon, and it shall be unlawful for any person to remove or to allow to be removed from said premises any dead or diseased animals, and all dead animals shall, within twenty-four hours, be burned or buried upon the premises.

Every person shall restrain diseased or distempered cattle, that they may not go at large, and no person or persons shall drive such cattle into and through this State, or from one point thereof to another.

Said cattle may be impounded if the preceding section is violated, and the owner thereof shall be held liable for all costs and damages.

It shall be unlawful for any person to use, let, sell or permit to run at large any horse, mule or ass diseased with glanders. (Laws 1867, chap. 74.)

It shall not be lawful for the owner of any domestic animal or animals, or any person having them in charge, knowingly to import or drive into this State animals having any infectious or contagious disease.

The owner, or person having the same in charge, of any domestic animals having any infectious or contagious disease, and knowing the same to be so diseased, who shall suffer such animals to run at large upon any uninclosed land, common or highway, or shall let the same approach within twenty rods of any highway, or shall sell or dispose of such animals without disclosing the fact to the purchaser, is deemed guilty of a misdemeanor.

Nothing in this act shall prevent the recovery of damages in a civil action against any person or persons violating the preceding section, and in addition to the penalties herein provided shall be liable for all damages that may accrue to the party damaged by reason of said diseased animal or animals imparting disease. (Laws 1883, chap. 3.)

A sheep inspector is to be appointed on petition by the board of county commissioners in any county of the State. He shall be a resident of the county. Provision is made for filling vacancies in the office, and said board of commissioners, on petition, may abolish the same.

Sheep inspectors finding any flock of sheep infected with what is commonly called the "scab," or any other contagious disease, shall in the manner hereinafter prescribed have power to define, limit and restrict the range of such sheep for the protection of the neighboring flocks, and notify the owner or agent of the diseased flock. He shall within ten days commence the curing of the same, and inspect said flock every twenty days until it is cured.

An "Inspection Record" shall be kept by every inspector, and shall show the name of the owner of every flock of sheep inspected, when inspected, the result of such inspection, and all orders and directions made in relation thereto.

It shall be the duty of every sheep inspector between the 15th day of May and the 15th day of August each year to inspect each flock of sheep kept in his county, and determine whether or not such sheep are free from scab or other contagious disease.

It is made the duty of every inspector, upon information and complaint, to inspect any flock of sheep said to have the scab or other infectious disease, and if on inspection it is found to be infected with a contagious disease the owner shall pay the expense of such inspection, otherwise the person lodging the complaint shall pay such costs, and shall be liable in a civil action therefor.

"Upon the arrival of any flock of sheep in any county in this State in which there is a sheep inspector, it shall be the duty of the inspector in such county, having knowledge of such arrival, to forthwith inspect such flock as to whether or not it is free from scab or other contagious disease." Provided, that if the owner, or his agent, of said sheep report the same to the inspector with a certificate of inspection within one month of such arrival, that such flock has been duly inspected, then such inspection shall not be necessary.

It is made the duty of the inspector to require of the owner of any flock of sheep, when inspecting the same, true answers to the following questions:

"First. The name of the owner of such flock, his ear-mark and brand. Second. The increase of such flock by purchase or trade since the last inspection. Third. From whom such increase has been received. Fourth. From what county and State such increase came. Fifth. Whether or not any part of them was, at the time inspected, infected with the scab or any contagious disease, and if so, what disease."

The sheep inspector may define and limit the range of any flock of sheep infected with scab or any contagious disease as authorized in preceding section, and notify the owner or agent of this order or direction, who may, if he considers the terms unreasonable, notify the inspector, and arbitrators shall be appointed

who, with the inspector, shall make such orders and directions as authorized in preceding section, as may seem reasonable and just, and their action in the premises shall be final.

The following fees, and no more, to be paid by the owner of the flock inspected, except as otherwise provided in this act, are:

"For each flock inspected at each annual inspection the inspector shall receive the sum of one dollar and in addition thereto the sum of ten dollars for every hundred sheep inspected or fractional part thereof. For every other inspection, the sum of three dollars per day for each day necessarily employed in such duty. Each arbitrator shall receive three dollars per day for each day necessarily employed in his duties."

The owner or keeper of any flock of sheep, any portion of which is infected with the scab or any infectious or contagious disease, shall be liable to any person damaged thereby in double the amount of damages such person may sustain by reason of such flock or herd or any part thereof being moved or allowed to stray from the premises of the owner of such flock.

It shall be unlawful for any person or persons having a flock or herd of sheep, any portion of which is infected with the scab, or any infectious or contagious disease, to allow such sheep to stray or be driven upon the ground of another, without the consent of the occupant thereof in writing, or to allow any such flock or any part thereof to come in contact, off his premises, with the sheep of any other person.

It shall be unlawful for any person or persons to bring into this State from without the State any sheep infected with the scab or any contagious disease.

All sheep six months old and upwards are to be suitably branded and ear-marked, and so kept branded and ear-marked and a record made of the same in the office of the county clerk of the county in which such sheep are kept. (Compiled Statutes of 1897, pp. 75-78.)

NEVADA.

The several boards of county commissioners appoint "Inspectors of Sheep," who are empowered to examine all sheep, and if found diseased to dip them, and no sheep may be brought into the State, or moved from one county to another, without first having been inspected and formally certified as free from disease. (R. S., 810-824.)

It shall be unlawful to drive into the State any sheep, cattle or horses having infectious or contagious diseases, or which have been exposed within ninety days previous to any such disease, and none shall be driven into the State between March 31 and November 1, without a certificate from the State board of health.

No person shall slaughter, expose for sale or sell, or bring into any city, town or hamlet for human food, any calf unless it is in good, healthy condition and four weeks of age.

It shall be unlawful to drive over any road or highway any horse infected with glanders or pink eye, or sheep with scab or foot rot; or neat cattle infected with Texas fever or pleuro-pneumonia; or any hog infected with cholera or trichina. (C. L. 1861-1900.)

NEW HAMPSHIRE.

The State board of cattle commissioners shall investigate as to the existence of tuberculosis, pleuro-pneumonia, foot and mouth disease and any other infectious and contagious diseases among cattle or sheep, and if found to exist to establish quarantine and do what they can to prevent the spread of such diseases, and if killed by their orders owners shall receive one-half of the appraised value, under certain restrictions.

No transportation companies may bring into the State or transport within the State any diseased animals.

The governor may forbid the entry of cattle from diseased localities. (Laws 1891, chap. 40; Laws 1893, chap. 33.)

NEW JERSEY.

Whenever the State tuberculosis commission shall be notified that cattle are supposed to be diseased with tuberculosis, an agreement shall be made as to the value of diseased cattle, and if any are slaughtered the owner shall receive three-fourths of such valuation, not exceeding forty dollars for each animal, and no compensation shall be paid for animals considered by the commission of no value. (Laws 1898, chap. 148.)

The importation of dairy cows and neat cattle for breeding purposes is prohibited, excepting they are accompanied by a certificate from an inspector, in authority in the State from which they came, certifying that they have been examined and subjected to the tuberculin test and are free from disease.

Common carriers are forbidden to bring cattle into the State without a certificate.

In case cattle should be imported without a certificate the State tuberculosis commission shall cause them to be examined and may cause them to be subjected to the tuberculin test, and to see that all such animals, giving indications of tuberculosis are slaughtered. No indemnity shall be paid to the owners. (Laws 1899, chap. 181.)

NEW MEXICO.

There are one hundred and seventy-five sections of laws in this territory, relating to domestic animals, many of which refer to methods of branding for identification and the duty of drovers and owners.

A sheep sanitary board consisting of three practical sheep raisers and owners, shall appoint inspectors to act under such regulations as the board may adopt, and to dictate quarantine and sanitary meaures for the prevention of disease or the spread thereof among sheep, and for the protection of sheep in the ter-

ritory its decision shall be final. The board shall have charge of all matters relating to the preservation of a healthy condition among sheep, the prevention of illegal or improper handling or dealing in sheep, registration of owners, marks and brands, and the keeping of records of sheep entering or leaving the territory, and in all matters of sanitation and quarantine the board is given full powers to enforce both the laws and their regulations.

Sections of the act define the duties of persons bringing sheep into the territory, quarantine of diseased sheep, inspection fees, penalties for bringing in sheep that have not been inspected, inspection of sheep about to be shipped, of dipping sheep, etc. (Compiled Laws 1897, as amended by chap. 33, Laws 1899.)

A sanitary board, consisting of five members, is empowered to prevent the introduction into the territory or spread of Texas fever, pleuro-pneumonia, tuberculosis, or any other contagious or infectious disease affecting cattle, and to stamp out such diseases and to adopt necessary regulations therefor. (C. L. 1897, secs. 182-185.)

The following sections are referred to in brief:

Quarantine against Texas fever, sec. 187.

Proclamation by the governor, sec. 188.

Certificate of health, how granted, sec. 193.

Driving cattle without certificates, sec. 194.

Expense of inspection a lien, sec. 195.

Other diseases than Texas fever, sec. 197.

Indemnity, sec. 198.

Old law in force, sec. 207.

Rules for slaughter-houses, sec. 208.

Owners of cattle to hold them for inspection, sec. 210.

Railroad company to be furnished with certificates, sec. 211.

Violations of the act, sec. 219.

Boards may employ veterinarian, sec. 226.

Appraisement before slaughter, sec. 228. (C. L. 1897, secs. 181 to 231, Laws 1899, chap. 53.)

NORTH CAROLINA.

Any person having swine affected by cholera shall isolate them from healthy swine; if they die of disease they shall bury them so as to be out of reach of other animals. (Laws 1899, chap. 173.)

The board of agriculture is empowered to investigate diseases of cattle and other domestic animals, suggest remedies for same and shall have power to quarantine such, regulate the transportation of stock in this State from one State to another, and to act in concert with the United States in quarantine against Texas fever. (Laws 1899, chap. 377.)

NEW YORK.

For the laws in this State, see full text in another portion of this volume.

NORTH DAKOTA.

This act provides for the division of the State into nine veterinarian districts, in each of which there shall be appointed by the governor one competent veterinarian, who shall be known as the district veterinarian. (Chap. 146, Laws of 1897.)

This act relates to the duties of district veterinarians, as follows:

The investigation of contagious and epidemic diseases among cattle, horses, mules, sheep, asses and other domestic animals within his district, where such disease may exist, and it shall also be his duty to make visits of inspection within his district where he may have reason to believe that there are contagious or infectious diseases among domestic animals.

The said veterinarian is empowered to seize and inspect at the State line bordering on his district, or at any point within his district, any horses, mules, cattle, asses or sheep which may be driven into or unloaded at any point within such district to

graze or run at large upon any of the lands within this State, and until such inspection shall be fully completed and such animals released by such veterinarian, they must be confined by the owner, agent or person in charge of such animals, in a reasonable space to be designated by such veterinarian. *Provided, however,* that if, upon an examination of the health certificates of the veterinarian of the State from which such animals were shipped, it appears that such animals are in good health and have not been exposed to any contagious, infectious or epidemic diseases, such veterinarian may allow such animals to graze or run at large within the State. The said veterinarian is to examine, as often as he may deem reasonable, all pens, inclosures and cars within the district in which domestic animals may be confined or transported, and to require the owner, agent or person in charge of the same to keep them in proper sanitary condition. He is to require the owner, etc., to cleanse, fumigate and disinfect all pens, etc., within two days after notice, when, in his opinion, such cleansing, etc., shall be necessary for the prevention of the spread of any disease among animals.

It is declared to be a misdemeanor for any person to knowingly carry or drive or cause to be carried or driven one or more sheep, affected with the scab or any infectious or contagious disease, into a herd of sheep belonging to another person.

Every owner of sheep having scab or other malignant contagious disease shall dip, or otherwise treat the same upon his own premises, *provided,* that where he has more than one ranch and the diseased sheep are not upon the ranch where the dipping works or other facilities for treating the diseased are situated, he shall have the right to drive through intermediate ranges, but in so doing shall consult the owner or occupants of said range as to where he shall cross the same, and in no case shall he enter another corral or water at his troughs or accustomed watering places with his diseased sheep, without the consent of the owner.

In all cases of contagious diseases found in any flock of sheep the sheep inspector is empowered to prescribe what dip or other remedies shall be applied, and specify the manner of treatment.

The owner or person in charge of sheep brought into any county of this State shall notify the inspector of the date of the arrival in said county, and before being allowed to mingle with other sheep they shall be quarantined for a period of not less than forty days, in a location approved by the sheep inspector of said county. *Provided, however,* where sheep have been ranged for not less than forty days near the county line of the county to which said sheep are to be removed and are known to be free from disease, the provisions of this section shall not apply. (Chap. 116, Laws 1891.)

This is an act relating to the duty of sheep inspectors, and they are required "to cause to be dipped all sheep that come into the State for the purpose of running upon or grazing upon the lands of this State. The dipping of such sheep shall be done under such rules and regulations as may be prescribed by the district veterinary. *Provided,* that this law shall not apply to sheep while on railway cars, or in railway stock yards, accompanied by proper certificates of health, and which sheep are not detained within the State more than sixty hours."

"When the owner is a resident of this State, importing such animals for breeding purposes or the ordinary purposes of husbandry, and has notified the district veterinarian of the time and place where the same may be inspected, as well as the place where such animals are to be dipped, and they are found free from any infectious or contagious disease, the inspection may be made free of fee, mileage or per diem to the owner." (Chap. 130, Laws 1897.) And in case this cannot be done, he shall immediately remove said sheep to a locality where they shall not be permitted to range within less than five miles of any other flock of sheep, and said sheep shall continue to be herded under the restrictions until, upon inspection, they shall be reported free from such disease.

"The owner or person in charge of any sheep which are now or shall hereafter be infected with the scab, or any infectious or

contagious disease, shall keep the said sheep securely within some inclosure, or shall herd them at a distance of not less than five miles from all farms, corrals, sheds or other established headquarters where sheep are kept or being herded." "*Provided*, that owners, etc., of sheep, as aforesaid, diseased as aforesaid, who, prior to the passage of this act, had established headquarters shall be allowed to range such sheep upon the public domain within five miles in any direction of such established headquarters, and, *provided further*, that said sheep shall not be allowed to range within three miles of any other headquarters, unless the same be less than five miles distant, in which case said sheep shall not be herded nearer to the other headquarters than a distance equal to one-half of the distance between the two headquarters."

"Any person owning sheep or any one in his employ shall have the right to examine any band of sheep that shall be driven, remaining within his district without a certificate of the health of such animals from a duly authorized State or district veterinarian or examiner of the State, from which such animals have been shipped, or which he has reason to believe have contracted any infectious or contagious disease or have been exposed thereto." (Chap. 147, Laws 1897.)

The county commissioners of any organized county shall, upon a petition signed by ten wool-growers of said county, appoint a sheep inspector who is acquainted with the diseases to which sheep are subject and a citizen of the county for which he is appointed.

The sheep inspector is required whenever he has knowledge or information of any sheep, within his jurisdiction, having the scab or any other malignant contagious disease, to inspect said flock and report in writing the result of his inspection to the State veterinarian, to be filed by him for reference for the county commissioners or any party concerned, and, if so diseased, once every four weeks thereafter to reinspect said flock and report in writing, the result and treatment, if any, in the same manner until said disease is reported cured.

It is made the duty of the owner, or his agent, of any flock reported by the inspector to be so diseased, to immediately herd them so that they cannot range upon or within one mile of any grounds accustomed to be ranged upon by any other sheep, or shall restrain them from passing over or traveling upon, or within one mile of any public highway or road. (Chap. 36, Laws of 1899.)

OHIO.

It is unlawful for any person to transport any hogs infected with cholera, within the State, but common carriers are exempted from this act. (Ohio Statutes, 4211-4217.)

The governor shall appoint three persons to constitute a board of live stock commissioners, whose duty it shall be to prevent the spread of dangerous and fatal diseases among animals, and provide for the extirpation of such diseases, and if any contagious or infectious cases are found they shall maintain quarantine as may seem necessary. Every person having knowledge of such disease shall report the same to the board, and no person shall bring within the State any diseased animal or one that has been exposed thereto, without the consent of the board.

Expenses of quarantine shall be paid by the owners of the quarantined animals.

When the governor has reason to believe that dangerous, infectious or contagious disease exists in other States or territories, he may, by proclamation, prohibit the importation of any live stock of the kind diseased into the State, except under such regulations as may be prescribed by the State board of live stock commissioners, and approved by the governor.

When the commissioners shall deem it best to destroy any diseased animals they shall first have them appraised and then such animals are to be destroyed; provided, that no animals shall be appraised, except cattle affected with contagious pleuro-pneumonia, or cattle, sheep or swine affected with foot and mouth disease, or such as have been exposed thereto.

In case of the destruction of any animal the compensation to be made by the State shall be computed on the basis of actual value, if any, at the time of slaughter; for any animal that has been kept in the same building two-thirds of such value, and in case of all others the full value. No person shall receive compensation for animals brought into the State in a diseased condition, or one that had been exposed to contagion in districts where dangerous diseases existed. No allowance shall be made on account of said slaughtered animals being thoroughbred or pedigreed stock.

Whereas, all cattle wintered in the States of Florida, South Carolina, North Carolina, Georgia, Alabama, Mississippi, Louisiana, Tennessee, Arkansas, Texas and Indian Territory, are infected with a germ which renders them capable, except during the frost of winter, of infecting northern cattle with a malady known as "Texas fever", while they show no manifestation of disease; therefore, during the months of March, April, May, June, July, August, September and October, no cattle shall be driven into this State from any of the States named or that have been wintered therein. Any transportation company conveying into or through the State, or any stock yard company receiving such cattle during the months aforesaid will not be permitted to unload the same for any other purpose than to be fed and watered or for immediate slaughter, and only in yards specially provided for that purpose, into which northern cattle will not be permitted to enter, and all arrangements shall be under rules of the board of live stock commissioners.

Animals suffering from glanders or farcy shall be isolated and not sold.

If the commissioners cause to be killed any animal affected with glanders or farcy the owner shall receive the actual value, provided the animals were not diseased when purchased.

Owners of sheep affected with foot-rot or scab shall not allow them to run upon any highway or on any uninclosed grounds, or sell such sheep, without notifying the purchaser.

Special restrictions are imposed on transportation companies when diseases are discovered among animals in transit. (Ohio Statutes, 4210-4212.)

Docking the tails of horses is forbidden. (O. S. 6951.)

The council of any village or city may appoint inspectors of beef-cattle, sheep, hogs, poultry, game, milk, milch cows, fresh meat and fresh fish.

It is unlawful for any person to kill, for the purpose of sale, any calf less than four weeks old or sell the same, or have in possession with intent to sell the meat of any calf which he knows to have been killed when less than four weeks old. (O. S. 6928.)

OKLAHOMA.

The agricultural and mechanical college board of regents are constituted the live stock sanitary commission, whose duty it is to protect the live stock of the territory from contagious and infectious diseases, by establishing and maintaining quarantine lines and by making regulations for enforcing the same, and to prevent the importation and exportation of diseased live stock. The said commission shall co-operate with the United States secretary of agriculture in establishing said quarantine lines, rules and regulations, as shall seem best, but in accord with those established by the general government.

The governor shall proclaim the line, orders and rules of the board.

Districts are formed and inspectors assigned and the following are points in the law:

Inspectors are to enforce federal and territorial regulations, and to make inspections when notified.

Inspectors can seize stock and enforce liens for charges.

Penalties for handling stock in violation of quarantine regulations.

Railway companies are to disinfect cars and pens.

Inspector is to kill certain diseased animals and pay for same. (Laws 1897, chap. 31.)

No person shall barter, sell or dispose of the carcass of any swine or other domestic animal infected with cholera or other infectious diseases, at the time of death, to any person for the purpose of manufacturing the same into lard, soap or other purpose, except that of burial or burning.

Live swine that are infected with contagious diseases shall not be sold or disposed of or driven on the public highway. (Laws 1899, chap. 2.)

OREGON.

It is the duty of the State veterinarian, upon receiving information from a stock inspector of any county that any contagious or infectious diseases exist, to immediately examine or deputize a competent person to examine all animals reported to be diseased, and if he finds such animals so infected to take such measures as he may deem necessary to prevent the spread of the disease. The commission shall be notified of his action, and shall instruct him how to proceed and prescribe such rules and regulations as the exigencies of the case may require for the suppression and eradication of the disease. The said State veterinarian may list and describe the domestic animals affected with such disease, and those which have been exposed thereto and included within the infected district or premises so defined and quarantined as would lead to their identification, and no domestic animal liable to be infected with the disease or capable of communicating the same, shall be permitted to enter or leave the district, premises or grounds quarantined, except by the authority of the commission. "When, in the opinion of the commission, it shall be necessary, to prevent the spread of contagious or infectious diseases among the live stock of the State, to destroy animals affected with, or which have been exposed to any such disease, it shall be determined what animals shall be killed

and appraise the same as hereinafter provided, and cause the same to be killed and the carcasses disposed of as, in their judgment, will best protect the health of domestic animals of the localities. When, in the opinion of the commission, any of the live stock of the State are infected with tuberculosis the commission shall have the power to instruct and authorize the State veterinarian to apply to such animals as are suspected of having tuberculosis the 'tuberculin' test." (Laws 1895, p. 60.)

Sec. 1. "That from and after the passage of this act it shall be lawful for any express company, otherwise authorized by law to transact express business within the State, to transport sheep, not to exceed four in any one shipment to or from any point within the State of Oregon, without an inspection of the sheep, and it shall be lawful for all shippers to ship sheep by express, not to exceed four in any one shipment, without an inspection thereof." (Laws 1898, p. 30.)

This act requires that "Whenever on examination of any bands or herds of sheep kept or herded in this State the stock inspector finds such sheep or any portion of them affected with scabs or scabies or any infectious or contagious disease he shall forthwith notify the owner or person in charge of such sheep in writing to dip said sheep for said disease within a period of fifteen days from such notice, and also during such period to keep said sheep from contact with other sheep by such means as he may specify;" *provided,* no person, company or corporation shall be required to dip a band of ewes, or any part of them, in which there are ewes with lambs, at any time from the first of March to the first of May of any year." There is also a provision as to the time of dipping ewes and also a provision as to the location of flocks of ewes and lambs and time for dipping such sheep in each year. (Laws 1891, p. 45.)

It is unlawful to "bring or cause to be brought into this State any sheep or band of sheep without first and within three months prior thereto, obtaining from a sheep inspector, duly appointed

and qualified under the laws of this State, a certificate of such inspector to the effect that said sheep have been personally inspected by such inspector, and are sound and healthy and free from scab or scabies or other infectious or contagious disease." "It shall be the duty of any sheep inspector upon the request of any person to visit and inspect any band of sheep, within his county, or within five miles of the line of the State, unless such band of sheep has been inspected by him within three months prior thereto, and if at that time said sheep are healthy and free from scab or scabies and all infectious and contagious diseases, and he shall issue to the owner or person in charge thereof a certificate to that effect; and if not healthy and free from scab and scabies and all contagious and infectious diseases he shall revoke any certificate which might have been issued by him, and the person holding such certificate shall forthwith on demand deliver the same to such inspector."

"Whenever the county court of any county has reason to believe that any disease mentioned in this act has become epidemic in certain localities in any other State or territory, or that conditions exist that render sheep likely to convey disease, it must thereupon, by order duly entered in its journal, designate such localities, and prohibit the importation from such localities of any sheep into its county, except under such restrictions as are hereinafter provided."

When said order is entered upon said journal "the owners or persons in charge of sheep which are intended to be brought into the said county from localities in any other State or territory against which sheep quarantine has been declared, as provided in the next preceding section, must forthwith notify the sheep inspector of said county of such intention, and such owner or person in charge shall not allow any sheep to be brought into the county until said sheep have been quarantined and inspected by the sheep inspector as provided in the next succeeding section; *provided*, that this section shall not apply to sheep being trans-

ported upon the railroad through the State of Oregon to points beyond the limits of said State, and which are not allowed to graze upon the public range of this State while being transported."

The sheep inspector of such county, upon receiving the notice as aforesaid, shall examine and inspect said sheep before they are brought into the State, and cause such sheep to be kept within certain limits for a term of ninety days, and the owner or person in charge is required to dip such sheep or otherwise treat them for the disease prevalent in the quarantined district. If the said sheep inspector shall find at the expiration of said time that said sheep are free from contagious or infections disease, he shall issue a certificate to the owner or person in charge of such sheep permitting them to be brought into this State. (Laws 1899, pp. 170, 171.)

PENNSYLVANIA.

It shall be the duty of the State live stock sanitary board to protect the health of domestic animals, to determine and employ the most efficient means for the prevention, suppression, control or eradication of dangerous, contagious or infectious diseases among domestic animals, enforce quarantine and other rules relating to movements and care of animals and their products, the disinfection of suspected localities, and the destruction of animals if it shall seem necessary. Provided, however, in the cases of any slowly contagious diseases, only suspected or diseased animals shall be quarantined.

When it is deemed necessary to condemn and kill any animals to prevent the spread of diseases, appraisers shall determine the value and the amount to be paid by the State, but not more than twenty-five dollars each for grade or common stock nor more than fifty dollars for registered stock, nor more than forty dollars for any horse or mule of common grade stock, and not more

than fifty per cent. of appraised value of any standard breed, registered or imported horses.

Examinations shall be made into the condition of the live stock in relation to contagious diseases, including the milk supply of cities, towns, boroughs and villages, and to take proper measures to protect such milk supplies from contamination. (Laws 1895, No. 66.)

The importation of dairy cows and neat cattle for breeding purposes is prohibited except when such cows and cattle are accompanied by a certificate from an inspector whose competency and reliability are certified to by the authorities charged with the control of the diseases of animals in the State from whence the cattle came, certifying that they have been examined and subjected to the tuberculin test and are free from disease.

In lieu of inspection certificate above required, the cattle may be detained at suitable yards near the State line, on the railroad over which they are shipped, and there examined at the expense of the owner, under such restrictions as may be provided by the board, and to remain in quarantine until properly examined and released by the State live stock board.

Said board may prohibit the importation of any cattle when they deem it necessary for the protection of cattle of the State. (Laws 1897, No. 82.)

RHODE ISLAND.

No neat cattle or other animals shall be brought into this State if known to be infected with contagious disease.

Town councils may pass such ordinances as they think proper to prevent the spread of diseases among animals.

The State board of agriculture may prohibit the introduction of any cattle or other domestic animals into the State.

No person shall knowingly sell or offer for sale any animal, or part thereof, infected with disease, or sell any milk from such animal.

Said board may make necessary regulations for the prevention, treatment, cure and extirpation of diseases among animals. (Gen. Laws 1896, chap. 98.)

The Rhode Island State board of agriculture shall look after the agricultural interests of the State, promotion of agricultural education, etc., etc.

The board may appoint commissioners in each county of the State, whose duty shall be to inquire into the condition of domestic animals in their counties, and if they have reason to suspect the presence of tuberculosis or other infectious or communicable disease, to quarantine all animals affected or supposed to be affected.

Any horse or other animal having glanders, farcy or other communicable disease, shall be killed and disposed of on the advice of the veterinarian. Not more than $50 shall be paid by the State for any native animal, nor more than $75 for any grade animal, or $100 for any single registered animal.

Animals may be quarantined if they are supposed to be affected with contagious diseases, one-third the cost of which shall be paid by the State.

In case animals are killed by order of the board, the State shall pay one-half of the appraised value, but if, upon post-mortem examination, it shall not prove to have had a disease, the State shall pay full appraised value. Provided, the State shall not pay for any animal not owned in the State for three months prior to slaughter.

No person shall receive compensation for any slaughtered animal if he brought it into the State knowing it to have tuberculosis.

No diseased animals shall be sold.

All cattle brought into the State must be accompanied by a certificate of health, which certificate shall give a description of each animal for identification, the place of examination, the preparation of tuberculin used, the quantity injected, the tem-

perature before inoculation, at the eleventh hour and every two hours subsequent for at least ten hours, or until the reaction is completed, and the certificate must be signed by a qualified and authorized veterinarian.

The Governor is authorized to accept the rules and regulations of the United States Bureau of Animal Industry, and shall co-operate with the inspectors of that department in suppressing dangerous, contagious and infectious diseases. (R. S. 1896, chap. 99.)

SOUTH DAKOTA.

It shall be unlawful to bring any Texas or Cherokee cattle into the State between the first day of November and the first day of February, but the right to bring them in shall not be a defense for any injury sustained by reason of the bringing such cattle into the State.

In case any such cattle shall be found spreading or communicating any disease among domestic cattle, they shall be impounded until the first of November at the cost of the owner.

The Governor shall name a veterinary surgeon, whose duty it shall be to inspect and ascertain the condition of domestic animals in the State, and to him all persons importing cattle, etc., shall report.

Diseased cattle slaughtered by the proper authorities are paid for by the State.

It is unlawful to sell or give away any diseased animals, and of those that have been known to have been affected within a year notice of the fact must be given to the purchaser.

It shall be unlawful to kill for butchers' purposes any such animal or to sell any part of it, or its milk.

The right to indemnity under this act is limited to animals destroyed by reason of the existence of epizootic disease, generally fatal and incurable, such as rinderpest, hoof and mouth

disease, pleuro-pneumonia, anthrax or Texas fever among bovines, and glanders among horses. No bovine shall be appraised at over fifty dollars except registered pedigree stock, which shall not be valued at exceeding one hundred and fifty dollars.

No equines shall be appraised at over one hundred dollars, except pedigree animals, which shall not exceed three hundred dollars.

The right of indemnity shall not exist, and shall not be paid for:

1. For animals belonging to the United States.
2. For animals brought into the State contrary to this act.
3. For animals diseased, if having been exposed when imported, or for animals from a quarantined district.
4. When animals were affected by other diseases than those named.
5. When owners fail to comply with the laws herein referred to.
6. When an owner knew the animals were diseased when he came into possession.
7. When the animals destroyed were brought into the State within ninety days previous.

It is unlawful to have in possession any horse, gelding, mare, ass or mule infected with glanders, and all such diseased animals must be destroyed. No such animal shall run at large or be sold.

Provision is made for the control of sheep and their diseases. County inspectors are appointed with power to investigate all lots brought to the State, etc., etc.

No live stock shall be shipped into the State from any infected districts south or east of the quarantine line as established by the United States government, or any line established by the Governor, unless accompanied by a valid certificate of inspection.

The laws of this State are very comprehensive on the subject of domestic animals and the control of diseases among them, and

very full regulations are made for the moving of animals within or into and out of the State. (Annotated Statutes, 1899, secs. 3114-3209.)

The law relating to swine and the control of the diseases thereof, was passed in 1899, chapter 131.

Calves under four weeks of age shall not be sold or offered for sale. (Statutes 1899, sec. 344.)

SOUTH CAROLINA.

It is unlawful for any person or persons to transport, within the borders of this State, any horse, mule or ass infected with glanders.

Any person or persons violating the aforesaid provision of this act shall be liable for all damages attending the introduction of said disease, to be recovered by any person so damaged, and be deemed guilty of a misdemeanor, unless he can produce a clean bill of health from some veterinary surgeon that said stock was not infected with said disease when transported within the borders of this State. (Laws 1890, No. 464.)

Section 1. "That it shall be the duty of the State board of health to co-operate with the officials of the Federal Government and with those of other States in establishing interstate quarantine lines, and in the making and enforcing of such rules and regulations as shall best protect the live stock industry of the State against infectious or contagious diseases."

Section 2. "That the said State Board of Health shall prescribe such rules and regulations as are necessary within said quarantine line for the preservation of the live stock industry within such territory, and duly promulgate the same." (Laws 1899, No. 77.)

TENNESSEE.

A State veterinary surgeon is appointed by the State board of health, and said board shall have supervision of communicable diseases among domestic animals within or that may pass through the State, establish quarantine, and make regulations against the spread and suppression of said diseases.

Any person knowing or suspecting the presence of such diseases shall report the same to the county board of health.

Whenever the public safety demands the destruction of any animals, they shall designate appraisers, who shall make a valuation of said animal, considering the health and condition of such animal at the time.

It shall be unlawful to import animals affected with pleuropneumonia, rinderpest, glanders or other communicable disease, or to sell or dispose of any such animal. (Laws 1893.)

It is the duty of the State board of health to co-operate with the United States government, and with those of other States, in establishing interstate quarantine lines and the enforcing such regulations as shall best protect the live-stock industry of the State against Texas fever.

County boards of health have charge of temporary quarantine stations until the State board can assume charge.

No person or corporation shall import or introduce any cattle into the State from any district south of the quarantine line established by the United States authorities, which are affected with splenic fever or fever ticks (*boophilus bovis*), except such cattle are immediately slaughtered, or are brought into the State in conformity with such rules as may be prescribed by the State board of health.

Animals diseased as aforesaid shall not be sold, transferred or driven in or through the State, except under the certificate of the board of health. (Laws 1897, Feb. 15.)

TEXAS.

It shall be unlawful to import into the State or move from one county to another, any flock of sheep in which one or more are infected with scab.

Every owner or person in charge of sheep knowing any of them to be infected with scab must dip them every twenty days in some preparation known to be effectual in curing scab.

Provision is made for enforcing this act at the expense of the owner. (Laws 1897, chap. 125.)

Provision is made for isolating horses, mules, jacks or jinnies if glanders or farcy are believed to exist.

The appraised value shall be paid to the owners, and the expenses of killing and disposing of condemned animals shall also be paid by the county. (R. S. 1895, and Laws 1899, chap. 165.)

UTAH.

It is made unlawful to bring any domestic animal affected with a contagious or infectious disease into or drive such in the State.

Any person having in charge any animal affected with glanders or farcy shall at once deprive it of life; failing to do so, any peace officer may perform the act.

Diseased animals may not run at large on uninclosed land, or on the highway, and the owner shall not sell any such animal without notifying the purchaser.

Diseased animals shall be removed to some place where they cannot endanger the health of other animals.

Penalties are prescribed, and in addition thereto any person violating this statute shall be liable for all damages that may accrue to any party by reason of said animals imparting disease. (R. S. 1898.)

No person selling milk or dairy products shall have in his possession at any place where milch cows are kept, any cattle having tuberculosis or other infectious or contagious diseases.

It shall be the duty of the dairy and food commissioner, in case he shall find that cattle are kept in violation of this act, to cause all such cattle, having any contagious or infectious disease, to be killed. (Laws 1899, chap. 48.)

Persons owning or controlling or ranging sheep shall have such sheep thoroughly dipped at least once a year in some preparation that will kill scab. (R. S. 1898, chap. 7.)

No dairyman or other person selling milk, butter or cheese, shall feed dairy cattle or keep on his premises, for the purpose of feeding the same, any swill, brewers' malt, vinegar slops, vinegar malt, distillery sprouts or any other food which may make said butter, milk or cheese unwholesome or unhealthy for use. (Laws 1899, chap. 34.)

VERMONT.

Sheep infected with "hoof ail" or "foot rot," or with "scab," shall be restrained and not allowed to run at large, and the owner shall, in addition to fines, be liable to any person damaged by his offense.

Infected sheep running at large upon a common highway or on lands not owned or occupied by him shall become forfeited to any person who takes them up, and the owner shall have no action at law for recovery.

No person shall knowingly bring any cattle into the State that are affected with pleuro-pneumonia.

A town meeting may appoint officers, raise money to arrest and prevent the spread of pleuro-pneumonia.

Animals known to be affected with infectious or contagious diseases shall not be brought into the State or sold or transferred thereafter.

The selectmen of the towns and the aldermen of cities may enforce such regulations as they may deem proper to prevent the spread of infectious and contagious diseases among domestic animals, and report the same to the Governor.

The board of agriculture may prohibit the introduction of horses or other domestic animals believed to be infected with or exposed to any contagious diseases, or may quarantine all such animals as the public good requires.

The board shall endeavor to obtain full information in relation to any contagious diseases near the borders of the State, and publish such information for the benefit of the public.

Whenever bovine tuberculosis or any contagious diseases exist in the State, among cattle or other animals, the board of agriculture may quarantine all such animals to restrain them, and enforce such treatment as may extirpate the diseases, but shall not resort to the tuberculin test without the consent of the owner, and the board may condemn and order killed any cattle or other animals believed to be infected with bovine tuberculosis; and may forbid the sale or removal from the premises of any dairy product from cows that are believed to have bovine tuberculosis.

The value of cattle or other animals killed by the written order of the board of agriculture shall be appraised just before killing, and on a basis of health. The limit of the appraisal of cattle shall be forty dollars each. A post-mortem examination shall be made, and if the animals be found affected with bovine tuberculosis, or any disease dangerous to public health, the owner shall receive one-half the appraised value, but if no such disease shall have been found to exist, then the owner shall receive full value of the appraisal.

No indemnity shall be paid for any animal slaughtered if not having been owned in the State at least six months previous to the discovery of the disease.

VIRGINIA.

It shall be the duty of the board of control of the Virginia Agricultural and Mechanical College to protect domestic animals from contagious and infectious diseases of a malignant character, whether said diseases exist in the State or elsewhere, and for this purpose they shall establish, maintain and enforce quarantine lines and such sanitary regulations as they deem necessary. It shall also be their duty to co-operate with the live stock quarantine commissioners and officers of other States, and with the United States Secretary of Agriculture, in establishing quarantine lines, etc., to protect the live-stock industry against Texas or splenetic fever.

The board, on receipt of information of the existence of any malignant disease, shall send a veterinarian to investigate, and if such shall be found to exist to do what they can to prevent its spread. No animal infected with disease, or capable of communicating the same, shall be permitted to enter or leave the district, premises or grounds quarantined.

The said board shall give and enforce such directions and prescribe such regulations as to separating, feeding and caring for such diseased or exposed animals as are necessary to prevent exposing others to disease.

Notice of quarantine lines shall be sent to the Governor, who, by proclamation, shall confirm and make effective said rules and regulations. The Governor may also prohibit the bringing into the State, from sections out of the State, affected by diseases, any animals unless accompanied by a certificate of health.

It shall be the duty of the railway corporations to disinfect their cars used in transporting live stock.

Owners or other persons who discover or who have reason to believe that any domestic animals are affected with any contagious or infectious disease shall report the same to the said board, and to the board of supervisors of the county in which such animals may

be found, and the said board of supervisors shall cause an investigation, and should they find a domestic animal suffering from disease, they shall establish a temporary quarantine to prevent the spread of the disease.

The said board of supervisors is empowered to quarantine against any other county of the State on account of Texas fever or parasites which may convey said disease.

No person shall knowingly bring into the State any animal which is infected with any contagious or infectious disease, or any animal that has been exposed to such disease.

Animals affected with any of said diseases shall not be permitted to run at large or to run with healthy stock; neither shall such be sold or transferred. (Laws 1896, No. 327, as amended by Laws 1900, No. 832.)

The owner of hogs or fowls that die of contagious diseases shall burn or bury them under ground as soon as practicable after death; and if he fails to do so, any justice, after notice to the owner, may cause any such dead animal or fowls to be burned or buried at the cost of the owner. (Laws 1896, No. 327.)

WASHINGTON.

Local boards of health, in case of the existence of tuberculosis or pleuro-pneumonia among cattle, or glanders among horses, or any other contagious or infectious diseases among domestic animals, shall cause such as are infected or exposed to be collected and isolated. Provided, that the provisions of this act shall not apply to sheep in counties having a duly appointed sheep inspector.

Local boards of health may order dangerously diseased animals killed and buried at the expense of the town, county or city over which the board may have jurisdiction.

The boards may make regulations to prohibit the passage from,

to or through their respective towns, counties or cities of any animals, and may arrest and detain all animals passing in violation thereof, and the board may also enforce rules preventing the spread of diseases among the animals of their towns, and those in the vicinity.

When the State board of health shall adopt regulations concerning the extirpation of the diseases of domestic animals, such regulations shall have precedence over those of any local board.

The State board shall have power to establish and maintain quarantine, and to condemn diseased animals to be killed without an appraisement or compensation to the owner thereof. (Laws 1895, approved March 20.)

There shall be created the office of State Veterinarian, who shall be the professor of veterinary science of the Agricultural College and Experiment Station, and he shall become a member of the State board of health.

He shall have general supervision of all contagious and infectious diseases among domestic animals, and he is empowered to establish quarantine against animals thus diseased, and make regulations to be approved by the board of health and the Governor.

It shall be his duty, on receipt of information of the existence of infectious or contagious diseases, to repair to the location and enforce such practice as the exigencies of the case suggest. Whenever he is of opinion that the public interests demand it, he may destroy all such animals if the owners consent, otherwise notify the Governor. Unless in his judgment immediate action is necessary, the Governor may appoint one or more competent veterinary surgeons to act in conjunction with the State board.

The Governor, with the State veterinary surgeon, may co-operate with the United States authorities for the objects of this act. (Laws 1895, March 22.)

The commissioners of each county may appoint a sheep inspector.

No person or corporation shall cause to be brought into the State any sheep without, first, and within three months prior thereto, obtaining from the inspector a certificate to the effect that said sheep have been personally examined, and that all such sheep are sound and healthy, free from scab, scabies or other infectious or contagious diseases.

No sheep shall be removed from one county or town to another without first, and within six months prior thereto, obtaining such a certificate as above mentioned.

Any person may ask the inspector to examine sheep in his county, or within five miles over the State line, if not inspected within the preceding three months, and if found free from disease he shall give the owner a certificate to that effect. If said sheep are not found healthy, he may revoke and recall any certificates previously issued.

Whenever the county commissioners shall believe that any of the diseases named are in other States they may prohibit the importation of sheep from such districts into their county from such localities, except under the following restrictions:

When persons propose to bring sheep into the State from infected districts, they shall notify the inspector, who shall examine them and quarantine them if found necessary, and order them to be dipped. If, at the expiration of sixty days, the sheep are found free from disease, he may grant a certificate.

It is unlawful for any person to bring into this State any sheep infected with scab or any other contagious or infectious diseases.

Any persons having sheep infected with disease shall keep them, and all which have been in contact, secure from contact with other sheep, and shall not permit them to go on any public highway or any inclosed land not their own, but they may be driven over the route and at such time as the county inspector may direct.

It shall be the duty of the sheep inspector to visit and inspect every band of sheep within his county during the months of April and May of each year.

Whenever, upon inspection, the sheep inspector shall find such sheep, or any portion of them, affected with scab or any infectious or contagious disease, he shall notify the owner or person in charge to put such diseased sheep and the band in which they are found into an inclosure, and to proceed to immediately treat them for the cure of such disease in some approved manner. Should the owner fail to do so as directed within ten days, the inspector shall seize such sheep, isolate them and treat them for the cure of such disease, and the cost thereof shall be a lien on the sheep so seized. No person shall be required to dip sheep between the first day of December and the first day of May.

No owner of any toll bridge or ferry boat shall permit any sheep to cross unless the person in charge of such sheep shall first exhibit a valid certificate, to the effect that such sheep are free from scab and all other contagious and infectious diseases.

Every certificate issued under this act to the owner of sheep continuously kept within the State shall be void after one year from the date thereof, and every certificate issued on sheep not kept in the State shall be void after six months from the date thereof. (Laws 1897, Feb. 26.)

WEST VIRGINIA.

This is an act to co-operate with the United States in the suppression and extirpation of pleuro-pneumonia, and authorizes the Governor on behalf of the State to accept the rules and regulations prepared by the Commissioner of Agriculture under and in pursuance of section three of an act of Congress approved May 29, 1884, for the purpose as aforesaid, and to co-operate with the authorities in the enforcement of the provisions of said act.

United States inspectors shall have the right of inspection, quarantine and condemnation of animals affected with any contagious disease, or suspected to be so affected, or that have been

exposed to any such disease. Said inspectors shall have the power to call on sheriffs, constables or peace officers, to assist them in carrying out the provisions of said act of Congress, and said inspectors shall have the same powers and protection as peace officers while engaged in the discharge of their duties.

The expenses of any and all measures that may be used to suppress and extirpate pleuro-pneumonia shall be paid by the United States, and in no case shall this State be liable for any damages or expenses of any kind under the provisions of this act. (Laws 1891, chap. 59.)

WISCONSIN.

A competent veterinary surgeon is to be appointed by the Governor with the approval of the Senate, to be known as the State Veterinarian. His duty shall be to suppress and prevent the introduction or spread of contagious and infectious diseases among domestic animals, to co-operate with the State Board of Health in the management of such diseases as are common to man and animals, or any condition of the lower animals likely to affect the general health of mankind. He shall make scientific study and investigations and experiments, and gather and diffuse information relative to the contagious and infectious diseases of animals. It is made the duty of the various town and village boards of health to take cognizance of such diseases among animals, and report all cases under their observation to the State Veterinarian, and also to prevent the spread of such diseases, and to co-operate with the said Veterinarian, and they are authorized to order quarantine of any animals suspected of being affected with such disease, or which have been exposed to such disease, and forbids the removal of such animals from any premises where they may be kept. In cases where they are unable to determine the nature of any disease, the said boards of health may request the State Veterinarian to make such investigation as may be necessary.

The State Veterinarian is authorized, if necessary, to order quarantine of any premises upon which domestic animals are that are afflicted with contagious or infectious diseases, or that are suspected to be affected with such disease, or have been exposed to the same, and to forbid the removal therefrom of any animals susceptible to such disease, said order of quarantine to be served upon the owner or occupant of said premises, and notice thereof posted at the usual entrance to said premises. and if said disease shall become epidemic in any locality. the State Veterinarian shall immediately notify the Governor, who shall thereupon, if deemed necessary, issue a proclamation quarantining said locality and forbidding the removal therefrom of any animal of the kind diseased or any kind susceptible to such disease, without the permission of the State Veterinarian. Any person removing or allowing the removal of any domestic animal as aforesaid shall be guilty of a misdemeanor and punishable by fine or imprisonment, and shall forfeit all right to indemnity as herein provided, and be liable to all persons injured thereby for damages by them sustained.

The State Veterinarian may, if in his judgment necessary, order slaughtered any diseased animal or animals which have been exposed to such contagion or infection of malignant or very fatal nature, such as rinderpest, foot and mouth diseases, pleuro pneumonia, anthrax and Texas fever among bovines; of glanders among equines, anthrax in sheep, and other diseases of like nature.

If the State Veterinarian shall deem the slaughter of any animal necessary, he shall notify a justice of the peace of the county in which said diseased animals are, describing the diseased animal with reasonable certainty, stating the name of the owner when known. After the said justice of the peace shall have entered the same upon his docket, he shall summon three disinterested citizens, non-residents of the immediate neighborhood in which the animals are owned or kept, and they shall make an appraise-

ment of said animals, and they shall certify that they have seen said animals destroyed. The value shall be what they were worth at the time of appraisal. In the case of horses affected with glanders, the appraisal shall in no case exceed fifty dollars.

If a justice of the peace shall be satisfied of the fact, he shall issue to the owner a certificate of slaughter, and shall state therein whether or not the owner is entitled to indemnity.

It shall be unlawful to import any domestic animals affected with or that have been exposed to any infectious disease. When the State Veterinarian shall judge that there is danger from the introduction of diseased animals, he shall recommend to the Governor that certain restrictions are necessary, and the Governor may issue a proclamation, designating localities from which they must not be brought into the State.

It shall be the duty of any person having reason to suspect that there are on their premises any animals affected with infectious diseases to report the same to the local board of health, who shall report conditions to the State Veterinarian.

The claims for compensation for animals killed is provided for, and if approved, he may pay two-thirds of the appraised value, but if he deems the appraised value is greater than the real value he shall be authorized to settle with the owner for a sum he deems just.

Payments shall not be made for animals belonging to the United States, the State of Wisconsin, or any city or village of the State, or for animals brought into the State contrary to this act, or where the owner has failed to comply with this act, or where the owner came into possession of the animal knowing it to be diseased, or for animals found to have been diseased when brought into the State, or where the owner has been guilty of negligence in exposing the animals to infectious or contagious diseases.

The State Veterinarian shall from time to time issue such bulletins of information as he shall deem advisable which, with his report to the Governor, shall be printed. (Laws 1897, sec. 1492a.)

WYOMING.

A Board of Sheep Commissioners, to consist of three members, is to be appointed by the Governor. Each member of said board must be a qualified elector of the county from which he is chosen, an owner of sheep within the State, and must reside during the term of office within such county. The State may be divided by said Board into suitable districts for inspection purposes, and may provide for inspection when necessary. It shall exercise a general supervision over and, so far as practicable, protect the sheep interests of the State from theft and disease, and devise and recommend such legislation as will foster and develop the sheep industry of the State. It shall have power to make rules and regulations for its own governance and its employes, and also for the State Veterinary Surgeon in and about the carrying out of the provisions of this act.

Upon the request of any organized wool-growers' association in the State, or of any three sheep owners in any county, or upon the recommendation of the State Veterinary Surgeon, the said Board must appoint a capable person as sheep inspector in and for such county.

Whenever complaint is made to the said Board that any contagious or infectious disease exists in any locality in any other State or Territory, amongst sheep or goats, or that conditions exist that render sheep or goats likely to convey such disease, the said Board, or a committee thereof, shall cause an investigation of such complaint, and if they find the complaint well founded, they shall certify the facts in relation to such complaint to the Governor of the State.

The Governor shall by proclamation, upon the receipt of such certificate, "designate such localities, disease and class of live stock affected, and prohibit the importation from such locality or localities of any of the live stock affected or which may have been exposed to contagion, into this State, except such stock has been held in quarantine under the control and supervision of

the State Veterinary Surgeon or a sheep inspector, as by law required, for a period of ninety days, as is or may be provided by law." (Laws 1899, chap. 26.)

CANADA.

It shall be unlawful to drive, lead or turn out any animal diseased with glanders or farcy, and all such animals shall be destroyed. The council of every municipality may indemnify the owner of any animal killed, as provided in this act, for loss.

Diseased animals shall be isolated, and no animals shall be led or turned out that have been kept in the same stables with diseased animals. (R. S. O., 1897, chap. 273.)

This act makes provision for preventing the spread of equine syphilis or other malignant venereal disease. (R. S. O., 1897, chap. 274.)

Horticulture.

The fruit-growing industry of the country has reached such great proportions that scientific study of insect pests and plant diseases has become a necessity for the protection of the orchards and fruit plantations.

The recent introduction of the San José scale and some other destructive insects from abroad and the insidious character of fungus diseases and the evident increasing injuries from them have led twenty States to create boards of horticulture, and State entomologists or authorized commissioners of agriculture to investigate plant diseases and insect pests, and have given them power to suppress or prevent the spread of such as are dangerously injurious.

Brief synopses of the laws are as follows, reference being had to the chapters and years for more complete information.

ALABAMA.

It is the duty of the commissioner of agriculture when informed of the existence of disease among fruit likely to permanently injure or destroy the orchards or fruit crops to cause a sample of such diseased tree to be sent to him or to some of the agricultural experiment stations in the State, and cause the same to be thoroughly examined and a written report furnished to him regarding the same.

Section 2 requires the owner of diseased trees to destroy them, but he shall first be permitted to show, if he can, that such disease does not, in fact, exist or is not dangerous to the orchards or fruit crops in his section. (Laws 1897, No. 502.)

ARIZONA.

Upon a petition presented to the board of supervisors of any county, signed by ten or more resident freeholders and possessors of an orchard, stating that the interest of their county requires legal protection against the importation, propagation or spreading of insects injurious to fruits and vines, as scale insects, codlin-moth and other insect pests, and asking for the appointment of a commission to supervise the destruction of said insects, said board of supervisors shall within twenty days thereafter select three commissioners for the county to be known as a county board of horticultural commissioners. The said commission may divide the county into districts, not exceeding three in number, and shall appoint one fruit inspector for each district so created. Said commissioners, through their fruit inspectors, shall make a thorough examination of all orchards, nurseries or place or places where trees or plants or fruits are kept or offered for sale or otherwise, and if found infested with any scale, bug, codlin-moth, or other insect injurious to fruit, trees or vines they shall notify the owner or person in charge of the said trees, vines, etc., that the same are infested with said insects, etc., and such persons are required to disinfect or destroy the same within a certain time, to be specified. If within such specified time such disinfection or destruction has not been accomplished the said person or persons shall be required to make application of such treatment for the said purpose as said commission may prescribe. After having been notified, if the owner or owners of said orchard, nursery, etc., fail, neglect or refuse to destroy the same or make application of treatment, as directed, he or they shall be deemed guilty of maintaining a public nuisance, and any such orchard, nurseries, etc., thus infested, shall be adjudged, and the same is hereby declared a public nuisance, and may be proceeded against as such, and if found guilty the court shall direct the aforesaid commission to abate the nuisance. The expense thus incurred may be a lien upon the real property of the defendant.

Authority is given the said commissioners to quarantine trees or fruits that are infested with any of said insects or all of them, their eggs or larvæ, while said trees or fruits are in the hands of a public carrier, and to forbid the delivery of the same until disinfected.

The said commissioners shall keep a record of their official doings and make a report to the county board of supervisors on or before the first of January of each year, of the condition of the fruit interests of their several districts. (No. 26, Laws 1891.)

CALIFORNIA.

County boards of horticulture can cause inspection of orchards and nursery trees, vegetables, vines and fruits, and any packing-house or store room, and the owner or person in possession must eradicate any injurious insect pests; failing to do so the board can cause it to be done and the cost shall be a lien on the premises. (Laws 1899, ch. 76.)

Any person who shall bring or cause to be brought into the State any nursery stock, fruit pits, fruit or vegetables shall, within twenty-four hours, notify the State quarantine officer of his district and hold said stock for inspection. Each car-load, case, box, package, crate, bale or bundle of nursery stock, pits, fruit or vegetables shall be plainly marked with the names of consignor and consignee, and also the name and place where grown. Any such shipment found infested with injurious insects or infected with plant diseases shall be disinfected at the cost and expense of the owners.

Any shipment found infested with insects not found in the State shall be at once destroyed or sent out of the State, at the option of the owner.

Any stock affected with " yellows " or " rosette " shall not be received, but returned or destroyed. (Laws 1899, chap. 76.)

COLORADO.

The State board of horticulture shall prescribe regulations for the prevention of contagious diseases among fruit and fruit trees and for the prevention, treatment, cure and extirpation of fruit pests, and for disinfecting grafts, scions, empty fruit boxes and trees. (Laws 1897, chap. 12.)

County inspectors can be appointed for each county, and no person shall carry into any county, having a county inspector, any trees, vines, shrubs, scions, grafts, fruits or fruit pits, without giving notice of their arrival at destination to the horticultural inspector of said county, nor shall he keep or offer for sale any article mentioned, except on order of said inspector and after they shall first have been inspected and disinfected, if necessary. The county inspector shall inspect every article within twenty-four hours after arrival at its destination, and if found infested with any disease or insect pest he shall require the owner to destroy the articles, or have them removed from the county. The inspector shall have power to maintain a quarantine station in which he can hold said articles for disinfection.

All shipments into counties having an inspector must be plainly marked with name of consignee and consignor and such evidence as is necessary to show where grown.

The county horticultural inspector may make an inspection of any orchard, nursery or trees, fruit-packing house, store room or other places, and if found infested with insects, or pests, or diseases injurious to fruit, fruit trees, vines, bushes or any horticultural interests, he shall notify owner, or person in charge, of the existing condition, and such owner shall eradicate all such pests. If the owner, or person in charge, shall neglect or refuse to destroy or treat, as directed, he or they shall be guilty of maintaining a public nuisance and shall be fined. If found guilty the court may order the inspector to abate the nuisance and said owner shall pay expenses therefor.

It shall be unlawful to spray fruit trees when in blossom with any poisonous substance injurious to bees. (Laws 1897, chap. 55; Laws 1899, chap. 102.)

CONNECTICUT.

This act provides for a commission on peach yellows, to be appointed by the State board of agriculture, to carry out such plans as may be deemed necessary for the eradication of the disease.

Sec. 3. Declares trees diseased by the yellows a public nuisance and they are to be destroyed.

Sec. 4. Allows an appeal to State board of agriculture.

Sec. 5. Provides a penalty for the sale of trees or fruit while appeal is pending.

Sec. 6. Provides a penalty for selling fruit from diseased trees.

Sec. 7. Has reference to the entry on premises to investigate or destroy trees or fruit. (Laws 1893, chap. 216.)

DELAWARE.

The governor is authorized to appoint peach commissioners.

It is made the duty of said commission, upon the application of five peach growers of the hundred to make examination and inspection of all peach trees within the respective hundred during each year. The first between the fifteenth of April and the fifteenth of May; and the second between the fifteenth of July and the fifteenth of August.

The said commissioners are required to mark or cause to be marked every tree having the disease known as "the yellows" and immediately notify the owner thereof.

It is made the duty of every owner, as soon as practicable, after such notice has been given, to pull up, remove and destroy every tree so diseased. If the notice be given on or before the first of June, the trees shall be pulled up and destroyed prior to

the fifteenth of July following; and if after the first of June and prior to the fifteenth of August, they shall be pulled up and destroyed not later than the fifteenth of October following.

Trees ordered to be pulled up and destroyed may be used for firewood.

The commissioners are authorized to have the diseased trees pulled up and destroyed, if it has not been done.

Section 10, reads, "Without excluding other symptoms or evidence of 'the yellows' the presence of the small willowy twigs or water shoots and premature fruit shall be conclusive proof of the existence of the disease."

Sec. 13. "In case the commissioners shall at any time find trees affected with 'yellows' and evidently undergoing a thorough course of remedial treatment, with indication of success, they may, in the exercise of their judgment, suspend condemnation of such trees until the next examination." (Laws 1891, chap. 282.)

This is an act to prevent the spread of the San José scale in the orchards of this State, and provides for the appointment by the governor of a competent person to inspect any nursery, orchard or orchards in this State in which the insect known as the San José scale is known or is believed to exist, and the powers and duties of the inspector are specified, among which he is to inform the owner, owners or tenants that the San José scale exists there, and recommending such remedies as he may deem proper for the extermination of said scale. (Laws 1897, chap. 419.)

FLORIDA.

Section 1. "That it shall be unlawful for any person to knowingly sell or give away any diseased nursery stock or seeds in the State of Florida." (No. 153, p. 213, Laws 1899.)

GEORGIA.

A State board of entomology, of which the commissioner of agriculture is chairman, shall have full power to enact regulations governing inspection, certification, sale, transportation and introduction of trees, shrubs, cuttings, buds, vines, etc., that they may deem necessary to prevent the further introduction and increase of insect pests and plant diseases. The State entomologist shall act as inspector and have power in any case of infested trees or plants, to prescribe treatment, which shall at once be executed; cost of material and labor shall be borne by the owner; provided, that in case the trees or plants shall be condemned, they shall be destroyed by the inspector at the cost of the owner. No compensation shall be allowed for any plants that shall be destroyed.

It is unlawful to offer for sale, sell or transport plants, scions, buds, trees, shrubs, vines or other plants, known to be infested with dangerous insects or plant diseases. Said board shall also adopt rules for preventing the introduction of crop pests from without the State.

It shall be unlawful for any grower, nurseryman or corporation to ship within the State any trees, shrubs, etc., without having been previously inspected by either a State or experiment station entomologist or government officer, within twelve months of the date of shipment, the certificate of inspection to accompany each box or package.

Any person residing in the State, dealing in or handling trees, etc., shall be compelled to have his or their stock inspected annually on or before the first of November of each year. If found to conform to the requirements of the board, the inspector shall furnish a certificate to that effect, and no shipment shall be made before filing such certificate with the board.

Every person residing outside the State dealing in or handling trees, etc., shall register his name or firm and file a copy of his certificate of inspection furnished by the entomologist, fruit in-

spector, or duly authorized government official of his State, with the board. Upon failure so to do said stock shall be liable to confiscation under order of the inspector.

When noxious insect or plant diseases exist, the inspector ascertaining the extent of infection shall act to suppress and eradicate said pests and give notice to owner, tenant or agent of infested premises to treat such infested plants as he may prescribe, or destroy them within ten days; if, after the expiration of ten days, the infested plants have not been treated or not properly applied, or they are not effectual in ridding plants of the pests, the inspector shall cause such plants to be properly treated or destroyed, as his judgment warrants. The cost of the work shall be covered by execution upon the owner of the premises. (Laws 1898, chap. 78, p. 94.)

IDAHO.

The State board of horticulture shall divide the State into not more than ten districts and appoint a horticultural inspector for each district, and a general State inspector, whose duties are, among other things, to inspect orchards, fruit-packing houses, store rooms, depots and other places where fruits are grown or stored and of fruits, trees, plants, vines or other horticultural material within the State supposed to be, or liable to be infested with insect pests or infected with contagious diseases, injuries to fruit, plants, trees, etc. If such pests be found the inspectors shall require the owners of the premises to eradicate them, and if said owners or persons in charge shall fail to do so the inspector is empowered to disinfect or destroy all infested or infected portions of the property. The expense is paid by the State, but the amount is collected from the owners. Inspectors can establish quarantine and provide regulations.

All peach, nectarine, apricot, plum, almond or other trees budded or grafted on peach stocks grown in a district where

"peach yellows" or "peach rosette" is known to exist are prohibited from sale, distribution or transportation within the State. Any person or transportation company having possession of any such shall, on request of an inspector, burn the same at once.

Fruit of any kind, trees, plants, scions, etc., pits or material grown outside the State infested by insects in any form or by infected fungus diseases known to be injurious or liable to spread shall not be sold or distributed in the State until examined by the inspector, and if found diseased shall be disinfected, the owner to pay cost of disinfection.

Any person shipping fruit, fruit trees, scions or plants within the State shall affix a stamp or label showing the name of the produce and the shipper of the same and the locality where grown. (Laws 1899, pp. 122, 437.)

INDIANA.

All nurseries where trees, shrubs, vines, plants or other nursery stock are grown shall be inspected at least once each year, not earlier than June first, and not later than October first, by the State entomologist, for the presence of San José scale or other destructively injurious insects or fungi on such nursery stock. The owner of any affected nursery stock shall take such steps as will exterminate destructively injurious pests and he shall not ship such stock.

Whenever a nurseryman or seller shall ship or deliver nursery stock he shall send on each package a printed certificate that such stock has been examined by a State or government entomologist and found, to his best belief, free from San José scale or other destructive pests.

When the State entomologist examines any nursery stock and finds it apparently clean he is directed to deliver to the owner a certificate of inspection and file a copy of same with the secretary

of the State board of agriculture, president of the State horticultural society and the director of the State agricultural experiment station.

Whenever a fruit grower, nurseryman or agriculturist shall know or have reason to believe that his trees, shrubs, vines, or plants are affected with San Jose scale, yellows, rosette, or other destructive insect or fungus pests, he shall notify the State Entomologist, who shall examine them and advise proper remedies for the destruction of such pests.

Every package of nursery stock shipped into the State from another State shall have the name of consignee, consignor and a certificate signed by a State or Government inspector showing that the contents have been examined by him and appear free from destructive insect or fungus enemies.

Whenever nursery stock is shipped into the State without a certificate on the outside of package, box or car, the fact must be reported to the State Entomologist by the agent of the railway, express or boat company or other person carrying or receiving the same (including mail carrier), and the Entomologist shall examine such unidentified packages at the expense of the express, railway, steamboat companies or other person carrying the same, and if found free from injurious insects or plant diseases, he may allow them to pass to their destination; otherwise he shall cause them to be burned or destroyed. But in no case shall the agent of the transportation company allow said package or packages to pass out of his possession. (Laws 1899, chap. 138.)

IOWA.

The State Entomologist is charged with the execution of this act. He may appoint qualified assistants and fix their compensation. A careful examination is to be made when requested by owner or agent, or when he has reasonable grounds to believe the

San José scale exists, between the first day of June and the fifteenth day of September in each year, of any nursery, fruit farm, or other place where trees or plants are grown for sale, and if found apparently free from the scale, he shall issue his certificate stating the facts, and shall collect therefor a fee of not less than five dollars, nor more than fifteen dollars, according to the amount of stock inspected. It shall be unlawful to sell, or offer for transportation any nursery stock outside the county where said nursery stock is grown, unless accompanied by a copy of this certificate.

Authority is given to the State Entomologist, when requested by owner or agent, or when he has reasonable grounds to believe the scale exists, to enter upon any grounds, public or private, for the purpose of inspection, and if he finds any nursery, orchard, garden or other place infected by the scale, he may, by himself or his assistants, enter upon such premises and establish quarantine regulations.

"If, in his judgment, the scale may be eradicated by treatment, he may, in writing, order such treatment, and prescribe its kind and character. In case any trees, shrubs, or plants are found so infested that it would be impracticable to treat them, he may order them burned. If the owner or persons in charge, after ten days' notice, fails to treat or destroy such infested trees or plants as ordered, the entomologist is authorized to perform this work by himself or assistant and to ascertain the cost thereof. He shall certify the amount of such cost to the owner or person in charge of the premises, and if not paid by him within sixty days thereafter he shall certify the amount to the County Auditor, to be collected as other taxes are."

"When nursery stock is shipped into this State, accompanied by a certificate as herein provided, it shall be held *prima facie* evidence of the facts therein stated," but if the State Entomologist, by himself or his assistants, has reason to believe such stock to be infested with the scale, he is authorized to inspect the same and subject it to like treatment as provided in this act.

It shall be unlawful to bring into this State any nursery stock unless accompanied by a certificate of inspection by a State entomologist of the State from which the shipment was made, showing that it has been inspected and found apparently free from the scale. (Laws 1898, chap. 53.)

ILLINOIS.

This is "An Act to prevent the introduction and spread in Illinois of the San José scale and other dangerous insect and contagious diseases of fruits."

It provides for the annual inspection of nurseries by the State Entomologist or his assistants, for the issuing of certificates and filing duplicates with the Director of State Agricultural Experiment Station, and with the Secretary of the State Horticultural Society, which shall at all times be subject to public inspection, and whenever nursery stock is shipped or delivered, a copy of the original certificate shall be placed and sent on each package so shipped or delivered.

It is made the duty of the State Entomologist to inspect, or cause to be inspected from time to time, suspected premises, and specified action is to be taken to prevent the spread of the diseases, such as notifying the owners and, if necessary, to treat the trees or destroy them and disinfect the premises, one-half of the cost of treatment to be paid by the owner, and certificates are to be given to the owner of premises free from disease.

Shipment of nursery stock from other States must bear certificate of inspection. Without such certificate it is unlawful for common carriers to deliver any such property before it is inspected by the State Entomologist or his assistants. (Laws 1899, p. 49.)

KANSAS.

Any person who shall misrepresent, deceive or defraud any person in the sale of any fruit, shade or ornamental trees, or any vine, shrub, plant, bulb or root, by substitution of inferior or different varieties, or who shall falsely represent name, age or class of same, shall be guilty of a misdemeanor, and liable to the party damaged in treble the amount of all damages sustained. (Laws 1886, chap. 100.)

KENTUCKY.

This act requires that nurseries are to be inspected once each year by the Entomologist and Botanist of the State Agricultural Experiment Station, and the owners of such nurseries must be notified if the San José scale or other destructively injurious insects or fungi exist in said nurseries, and he is required to take such measures on or before a certain day, as will be effectual for the destruction of said insects. It shall be a misdemeanor to ship or deliver any such infected stock, punishable by a fine of fifty dollars for every such offense.

A certificate must accompany each package of stock shipped, showing it was examined by the State Entomologist, and failure to furnish such certificate subjects the offender to a fine of fifty dollars for each and every shipment.

The State Entomologist is authorized to make certificate of examinations of stock and file similar certificate with the Commissioner of Agriculture, stating that he has examined said stock and finds it free from San José scale and other injurious insects and fungus enemies, which certificate shall be open to public inspection. Nurserymen, fruit growers or agriculturists who have reason to believe that their trees, vines or plants are affected with San José scale, yellows, rosette or other destructive insects or fungus enemies must notify the State Entomologist, who shall

examine and recommend the proper remedies for the destruction of the same.

Nursery stock shipped from other States must be plainly labeled with name of consignor and consignee, the contents and a certificate of a State or Government inspector that said stock is free from San José scale or other destructive insect or fungus enemies, and if shipped into this State without being labeled, etc., with certificate as required, said nursery stock may be seized, and, if the provisions of this act have been violated, to order the return to the shipper or consignor of the said nursery stock, unless the consignor or agent shall have said stock examined by the State Entomologist or his appointees at his own expense, and upon failure to comply with the provisions of this act any justice of the peace shall order the constable or sheriff to burn or destroy, at the expense of the consignee or agent, such nursery stock.

It shall be unlawful for any person, knowingly or willfully, to keep any plum, cherry or other tree infected with the contagious disease or fungus known as the 'black knot.' Every tree so infected is declared to be a public nuisance, and the cutting down or destroying the same or any part thereof, if done in accordance with the provisions of this act, is lawful, and no damage can be obtained for the same. If any person shall refuse or neglect to comply with the aforesaid provisions, it becomes the duty of the commissioners to remove and destroy by fire every tree or part of tree.

In cities of the first and second class, the mayor shall discharge the duties and the cities make the payments provided for in this act, so far as said disease exists in any of said cities. (Laws 1894, chap. 101.)

LOUISIANA.

"It shall be unlawful to bring into this State any fruit trees or vines, shrubs, scions, cuttings, buds, grafts, fruit pits or any

kind of fruit growth affected with any infectious disease or insects injurious to the growth of fruit, or propagate the same, or offer the same for sale, or in any way distribute or attempt to distribute the same in the State."

All fruit trees, etc., as aforesaid, brought into this State for sale or distribution, shall be properly labeled with the name of the owner, agent, shipper or grower, the locality where grown, and be subject to the inspection of the Entomologist of the State Horticultural Experiment Station.

The duty of the Entomologist is defined to be, by the request of the Director of such station, to visit any section of the State, when such visit can be made without expense to it, where there are diseased fruit trees or insects injurious to tree growth, to examine and report on the same, and if the examination proves the infected trees perniciously infected, it shall be the duty of the owner, agent or possessor of such diseased fruit trees or infected tree growth to at once disinfect or destroy the same. (Laws 1894, No. 129.)

MARYLAND.

"A State horticultural department is established for the State of Maryland; its purpose is to suppress or eradicate the San José scale, peach yellows, pear blight and other injuriously dangerous insect pests and plant diseases.

The said horticultural department shall be under the control of the trustees of the Agricultural College and Experiment Station.

It is made the duty of the said officers to seek out and suppress all pernicious insect pests and contagious diseases hereinbefore mentioned as destructive to horticultural and agricultural interests of the State.

Should any insect or disease be found capable of being eradicated without the destruction of the tree or plant, they shall cause

the trees, vines, etc., to be treated with proper remedies and appliances for the purpose, and the said State officers shall also treat or have treated any and all suspicious trees, etc., found to be in a dangerous proximity to those infected as aforesaid, to prevent the dissemination of the aforesaid insects or diseases.

Should the said officers find any fruit trees, vines, etc., infected or diseased, they have the authority to mark the same and notify the owner or owners, tenants or person in charge of such premises, and if they fail to destroy or treat the same within ten days after notification, then the said officers shall destroy or treat the same.

The said trustees are authorized to send officers of the horticultural department at least once a year into each county of the State for the purpose of determining by inspection the healthfulness and general condition of the horticultural and agricultural interests.

The State entomologist and the State pathologist or their assistants are required by the said board of trustees to inspect at least once in six months all nurseries of trees, vines, etc., within the State, and if found free from pests to give to the owner or owners or persons in charge of such nurseries a certificate of inspection, showing such nurseries or premises to be apparently free from such insects and diseases.

The same rules and regulations apply in this section as in section 56 of this act with regard to nurseries found infected with the aforesaid insects and diseases, and the sale, shipment, sending out, giving away by mail, express or otherwise of any trees, vines, etc., from such nurseries or premises, without accompanying the same with a copy of the said certificate and firmly attached upon each carload, box, bale or package so sent out or delivered, is prohibited.

All nursery stock within the State subject to the attacks of the aforesaid insects or diseases shall be fumigated by the nurserymen owning the same, with hydrocyanic acid gas in build-

ings or inclosures inspected and approved by the aforesaid officers, under their direction.

When any nursery stock is shipped into the State it must be properly labeled, with certificate accompanying the same, showing that it has been inspected by a qualified State or government officer, and that it is apparently free from the aforesaid insects and diseases. If shipped into the State without such certificate, the transportation company, etc., shall not deliver the same to consignee, etc., and shall notify the State officers of the fact, who shall require the consignee to show why said stock should not be seized, and said agent or consignee is required to return said trees, plants, etc., to the shipper or consignor, who shall have the same examined by said State officers, who shall certify that such stock is apparently free from the insects and diseases mentioned therein, and tag every carload, box, bale and package inspected, with their certificate of inspection, and if said agent or consignee fail to comply with these requirements, then the constable or sheriff shall burn and destroy such trees, plants, etc., shipped into this State in violation of this sub-title.

"If any nurseryman, dealer or agent sell, ship or deliver any trees, plants, shrubs or vines into this State, which are infected with San José scale, peach yellow, pear blight or other injurious diseases, and upon examination by the State pathologist, State entomologist or their assistants, are condemned for being so infected, the said trees, plants, vines and shrubs shall be destroyed, and the nurseryman, dealer or agent shall forfeit the value of such stock, and shall not collect the same from the purchaser or consignee."

"It shall be unlawful for any person to keep, or allow to be or remain on his lands or premises, in the State, any peach, almond, apricot or nectarine tree infected with the contagious disease known as the yellows, or to offer for sale, or shipment, or to sell or ship to others any such trees, or the fruit thereof in any form."

"The trees and fruit so infected shall be subject to destruction as public nuisances as herein provided, and no damage shall be awarded for such destruction," and it is made the duty of every person, when he is aware of the existence of such disease in any tree or fruit owned by him, to forthwith destroy by burning the same, or cause it to be destroyed by burning.

The county commissioners are required to appoint, each year, three competent peach growers for each election district of the several counties, or for such election district as said commissioners may deem best, to act as "Tree and Fruit Inspectors," the term of office being during the year following their appointment or during the pleasure of the commissioners.

The duty of the said "Tree and Fruit Inspectors" is defined to be an examination of the trees or fruit in their respective districts where the yellows is supposed to exist, and if said trees or fruit are found to be infected, to place a distinguishing mark upon the same, and to notify the owner or person in charge of the trees or fruit of the fact, with an order to destroy by fire the trees so marked, within fifteen days, and in case of infected fruit the person in whose possession or control it is found is required to immediately destroy the same, or cause it to be destroyed by fire.

If the owner or person in charge of the trees or fruit, or in whose possession the same may be as aforesaid, refuses or neglects to comply with the order of the said "Tree and Fruit Inspectors," to destroy the trees or fruit, said inspectors are required to lodge a complaint before one of the justices of the peace of the county, who shall forthwith summon the owner or person so neglecting or refusing, and if satisfied of the existence of said disease, as charged, to order the said inspectors, or one of them, or a constable of said county, to destroy said trees and fruit, and for this purpose they are authorized to enter upon any premises in said county and seize said diseased trees or fruit whenever found, and have the same destroyed by fire.

"Yellows" is hereby declared to be a contagious disease affecting the constitution and vital growth of the tree, and manifested by the following symptoms or one of them: 1st, a premature ripening of the fruit, which is flavorless, and with the color thereof not solid, but mottled or variegated; 2d, wing growth of shoots from the trunk or branches of the tree. (Sup. Pub., Gen. Laws 1890-1900.)

MASSACHUSETTS.

The State board of agriculture is authorized to execute any reasonable measures to prevent the spreading and extermination of *ocneria dispar*, or gypsy moth, and make regulations to this end.

It shall be unlawful to bring this moth into the State, or transport within the State said insect or its eggs.

Damage to property shall be paid by State, whenever such damage is caused in an effort to exterminate the pest. (Laws 1891, chap. 210.)

Two hundred thousand dollars, in addition to an unexpended balance of 1898, is appropriated to exterminate gypsy moth. (Laws 1898, chap. 31; chap. 290.)

The State board of agriculture is authorized to exterminate the brown-tail moth. (Laws 1898, chap. 544.)

Two hundred thousand dollars was appropriated towards expenses in extermination of the gypsy and brown-tail moths. (Laws 1899, chap. 80, and chap. 268.)

MICHIGAN.

It shall be unlawful for any person to keep any peach almond, apricot, plum, prune, cherry, nectarine or pear tree infected with the contagious disease known as yellows, black-knot, peach rosette, little peach or pear blight, or to offer to sell or ship any of the

fruit thereof, except the fruit of the plum, cherry and pear tree. That both tree and fruit so infected shall be subject to destruction as a public nuisance. (Laws 1899, chap. 100.)

It is unlawful to keep trees infected with yellows or to ship the fruit of same. No damage shall be awarded for the destruction of trees affected by contagious diseases. (C. L. 5681.)

The duty of the township commissioners is to mark and destroy infected trees or fruit at the expense of the township or city if the owner fails to do so, and if the owner refuses he shall be deemed guilty of a misdemeanor. (C. L. 5687-5694.)

It shall be the duty of every owner or occupier of an orchard, nursery or vineyard, to spray with a poisonous solution or disinfectant, to destroy such injurious insects or contagious diseases, all fruit trees or vines grown on such lands which may be infected with any injurious insect or worms, or infected with contagious disease known to be injurious to fruit or fruit trees or vines. Provided, that if such trees and vines are infested with San José scale or other scale insects, such trees or vines shall either be effectually sprayed or destroyed. Provided, also, that no such spraying shall be done while said fruit trees or vines are in blossom, except in the case of canker worm. (C. L. 5689.)

The State board of agriculture shall appoint a State inspector of nurseries and orchards, who shall inspect all nurseries as to whether they are infested with San José scale or other destructive insect pests or infected with infectious or contagious diseases, and if, upon such inspection, he find no such disease, he shall give the owner a certificate to that effect, and shall file a duplicate with the State board of agriculture, and in case he shall find any disease he shall instruct the owner to remove or eradicate it within five days, and the owner shall not ship any such trees, vines, shrubs or plants as are infested or infected, under a penalty of one dollar for each tree or plant shipped. Should the owner fail to treat or destroy diseased trees within the time specified, the State inspector shall have proper remedies applied, the cost of same to be paid by said owner. (C. L. 5690-9.)

Trees, plants, etc., shipped into this State must be accompanied by a certificate of inspection, showing that the contents of each package have been inspected by a State or government officer and are apparently free from disease. Any nursery stock received without such certificate must be reported by the railroad company to the State nursery inspector within twenty-four hours. (C. L. 5699.)

Any person growing or offering for sale nursery stock, shall, on or before the first of August of each year, apply to the State board of agriculture, for inspection of said stock and a license for its sale, and shall deposit with said board a fee of five dollars as a license fee for himself as principal. Such license shall be good for one year, and each such principal shall execute a bond in the sum of one thousand dollars, conditioned that he will comply with this act, and that upon demand of the State board of agriculture, a list of the persons to whom he has sold or delivered any such nursery stock, giving the species as well as the post-office address. Persons engaged in fruit-growing may exchange surplus among themselves, and are exempt from this section of the law. (C. L. 5700.)

No person or corporation resident of another State shall engage or continue in the business of importing nursery stock, or selling within this State, or selling for subsequent importation, without first having obtained a license from the State board of agriculture to do so, and he shall file the required bond and a certificate of inspection by a State or government inspector, or that of some person designated by the Michigan State board for such purpose. (C. L. 5701.)

The township commissioners referred to above may apply to the State nursery inspector for help and assistance in their labors when uncertain as to the existence or nature of infectious or contagious diseases, and his recommendation shall be final. (C. L. 5703.)

It shall be the duty of the State inspector, whenever it shall come to his knowledge that any diseases exist in any orchard or

are supposed to exist, and if so found on investigation, he shall proceed as above provided in the extermination of same. If the owner shall neglect or refuse to carry out the instructions of the inspector within five days, the said inspector shall employ all necessary assistance to carry out his orders, and the cost shall be assessed as a special tax on the premises concerned. (C. L. 5704.)

MISSOURI.

This law creates and establishes a fruit experiment station in South Missouri to experiment with the different kinds of fruit, to ascertain the desirable varieties, to study the different diseases and insects which injure fruits, berries, vines, etc., and best remedies, with power to remove or destroy infested trees or orchards, to prevent the spread of diseases and pests. An inspector appointed by the Governor is under the control of the board of trustees of said station, whose duty it is to visit sections of the State and prescribe remedies for diseased trees or orchards. If he should find that there is danger of any disease spreading and likely to injure other trees and orchards, he shall make a full statement to the County Court, which shall notify the owner of said trees to show cause why they should not be destroyed; if the court shall believe it best to destroy said trees, it may issue an order, and the inspectors shall employ laborers to dig and burn such trees, the expense to be paid from the funds of the board. (R. S., chap. 66, secs. 4725-4733.)

MONTANA.

Every person who maliciously injures or destroys any standing crops, grain, cultivated fruits or vegetables, the property of another, is guilty of a misdemeanor. (R. S. 1055.)

The State board of horticulture may prescribe regulations for inspection and disinfection, to prevent the spread of contagious

diseases among fruit and fruit trees, and for the extirpation of such diseases and pests. The "Inspector of Fruit Pests" shall visit the nurseries, orchards, stores, packing houses and other places where horticultural products are handled, and see that all regulations of the State board are complied with, and shall have power to enforce the same and to destroy or disinfect all fruit, trees, etc., found infected with any disease.

Any person who shall sell or deliver any nursery stock must notify the inspector of the date and nursery, or railroad station where said stock may be, and the inspector shall examine it, and if found free from all disease and pests, he shall so certify, but if found diseased or infected with any pests, said inspector shall order the destruction of all such stock, together with all boxes or packing material.

Every owner of an orchard, nursery, store-room or other place where horticultural supplies or products are kept, which shall become diseased, shall notify the inspector and shall, at his own cost, comply with the instructions of the State board as ordered by the inspector. If said owner refuses, then said inspector shall eradicate such disease or pest, and the expense thereof shall be a tax on the property of the owner.

No person or transportation company shall deliver or turn over any nursery stock, without an inspector's certificate. (Laws 1899, chap. 70.)

NEW JERSEY.

All gardeners, horticulturists, farmers and nurserymen, and all growers and dealers in plants or fruits of any kind, must keep their premises free from all injurious insects that might spread from infested plants to others on the highways or adjoining premises.

Notice shall be given by the commissioners to any person on infested premises to eradicate the pests within five days, and if not

done they shall report to the State entomologist, who shall decide what measures shall be adopted to prevent the spread, and render harmless or destroy any injurious insects that may be discovered. A notice of his decision shall be given to the owner of the premises, and failure to comply with the requirements of said notice shall subject the said owner to fines, and the enforcing officer shall seize and destroy the infested trees, plants, shrubs or vines.

Any nurseryman may require the State entomologist to examine or have examined the stock grown by him to ascertain whether or not injurious insects are liable to spread on such stock. Provided, that such nurseryman or grower of plants for sale, who may desire such examination to be made for his benefit, shall pay all expenses connected therewith.

In case no such insects are discovered, such nurseryman may demand a certificate that such inspection has been made, and that no injurious insects have been discovered.

Any nurseryman or grower of plants, shipping the same into the State, shall attach to each box, parcel, bale or package, containing plants, shrubs, trees, cuttings, scions or buds, a certificate or a copy of a certificate obtained from such authority as is authorized to give the same by the State wherein they were grown, setting forth that they had been properly inspected, not more than six months before shipment, and been found free from San José scale or other dangerous insects that might be transferred on nursery stock from the nursery to the orchard; any such box, parcel or package found at any station or warehouse, or in the hands of any common carrier, without such certificate, may be detained, until the same can be examined; and in case the contents thereof are found infested by San José scale or other insects considered dangerous by the State Entomologist, the same may be destroyed or reshipped to consignees, and at the expense of the common carrier.

Florists' stock is exempt from the provisions of this act. (Laws 1898, chap. 104.)

NEW MEXICO.

When it shall be known to the county commissioners that certain orchards or nurseries, or trees or vineyards, are infested with scale insects, codlin moth, or any other insect pest known to be destructive to trees or vines, they shall appoint a county board of horticultural commissioners, whose duty shall be to supervise their destruction. It shall be the duty of said board to make inspection of orchards, nurseries or vineyards or trees or any fruit-packing houses, and if found infested with scale, codlin moth or other pest injurious to fruits, trees or vines, they shall notify the owners and require them to disinfect or destroy the same within a specified time. If the owner fails to destroy or disinfect as directed, the premises shall be declared a public nuisance, and the board shall abate the same, and the expense incurred may be a lien upon the real property of the defendant. (C. L. 1897, secs. 707-713).

When twenty-five fruit growers or owners shall petition the boards of county commissioners, stating in substance that there is danger of the introduction in said county of the codlin moth or other worms or insects destructive of fruit by reason of the shipment of apples or other fruits into said county, and when said commissioners, upon examination, are satisfied of the truth of the petition presented, they may by proclamation prohibit the shipment of fruit into said county by an imposition of a license or other lawful means which said commissioners may deem best and most effective to accomplish the purpose of this act. (Laws 1899, chap. 55.)

NEW YORK.

For this State, reference is made to chapter 482 of the Laws of 1898, printed in full, elsewhere in this volume.

NORTH CAROLINA.

The State commissioner of agriculture, the director of the State experiment station, and the president of the State horticultural society are constituted a commission for the extermination of noxious insects, fungus diseases and weeds.

This commission shall publish lists of such dangerous crop pests and the remedies, and enforce regulations to prevent their introduction and spread.

No person shall keep on his premises any injurious crop pest or permit the seeds to mature. If he should fail to carry out the orders of the commission, they may have the premises cleaned up, and the cost shall be a lien thereon. An inspector is employed by the commission. (Laws 1897, chap. 264.)

A board of agriculture was established to have supervision of insect pests and fungus diseases, and authorized to make regulations for their control. (Laws 1899, chap. 377.)

OHIO.

It shall be the duty of the board of control of the agricultural experiment station, or through their assistants, to seek out and cause to be exterminated the San José scale and other dangerous insects, and tree, shrub, vine or plant diseases. Black knot and peach yellows are hereby declared dangerous, and affected trees shall come under the provisions of this act.

All nurseries in the State shall be examined once each year, not later than August 15, as to whether infested or infected, and if such nurseries shall be found free from disease, the board shall, on receipt of ten dollars, give each owner a certificate of the facts, provided it shall require but one day or part of one day to make inspection, and five dollars shall be charged for each additional day. This certificate shall be void after August 15 of the

year following. Duplicate certificates shall be filed with the board.

If any dangerously injurious insects or infectious diseases are found on the premises or nursery stock, the board may order and enforce such treatment of said nursery stock as they may deem sufficient before granting a certificate.

Whoever shall ship any nursery stock shall attach a copy of his original certificate.

No person growing nursery stock for sale shall deliver or ship any such stock without applying to the board for a certificate.

A further duty of the board shall be to cause the examination of all orchards, gardens, and other premises, either public or private, which they shall have reason to suppose are infested or infected with diseases liable to spread. If it shall be found that any place is diseased as aforesaid, the same shall be declared a public nuisance, and they shall notify the owners or persons in charge and direct them to use all possible measures to prevent the conveyance and spread of such diseases, and such property shall not be removed without the consent of the board.

If the persons so notified shall neglect or refuse to treat and disinfect said premises or property in the manner and within the time prescribed, the board shall cause such property to be treated, and the owner shall pay one-half the cost thereof.

Any tree, plant, shrub, etc., which may in the judgment of the board be so badly infested as to render the expense of treatment unjustifiable, shall be declared a public nuisance, and may be destroyed by them without liability of compensation to the owner.

Every package of nursery stock shipped into this State from other States, country or province, shall be plainly labeled on the outside with the names of the consignor and consignee, and a certificate showing that the contents have been inspected by a State or government officer, and that the contents appear free from all dangerous insects and dangerously infectious diseases.

When any nursery stock shipped into the State without such certificate plainly affixed on the outside of the package, box or

car, it must be reported within twenty-four hours to the said board by the railroad, express or steamboat company or by other persons carrying the same, and it shall be unlawful to deliver any such property until it has been inspected by the board or its assistants, and by them certified as apparently free, etc.

When nursery stock is shipped into this State, accompanied by a certificate, as herein provided, it shall be prima facie evidence of the facts therein stated. But should said board examine any such nursery stock and find it diseased they shall hold it subject to the order of the shipper, not exceeding ten days, before destroying the same.

The provisions of this act shall not apply to florists' greenhouse plants, bulbs, flowers and cuttings, known as greenhouse stock.

An appropriation of fifteen thousand dollars is made to carry out the provisions of this act. (Ohio Laws 1900, p. 221.)

OREGON.

This is an act to protect the fruit and hop industry in the State of Oregon.

Section 1. "That it shall hereafter be unlawful for any person, firm or corporation owning or operating any nursery, fruit orchard of any kind, hop yards, flower gardens, or ornamental trees, to throw any cuttings or prunings from any fruit trees, nursery stock, ornamental trees, or hop vines into any public road, highway, lawn, field or other inclosure, or into any watercourse of any kind; but they shall destroy such cuttings or prunings with fire within thirty days from the time such cuttings or prunings are made."

Sec. 2. It is made the duty of said person, firm or corporation as aforesaid, knowing said nursery, fruit orchard, etc., to be infected with any kind of insect pests, or disease, to immediately spray or destroy the same in such manner as the fruit commission for his district may direct.

Sec. 3. "It shall be unlawful for any person, firm or corporation doing business in the State of Oregon to sell paris green, arsenic, London purple, sulphur, or any spray material or compound for spraying purposes, in quantities exceeding one pound, without providing with each package sold a certificate, duly signed by the seller thereof, guaranteeing the quality and per cent. of purity of said materials."

Sec. 5. It shall be unlawful for any person, firm or corporation to import or sell any infected or diseased fruit of any kind in the State of Oregon.

Sec. 6. It is deemed a misdemeanor for any "person who packs or prepares for shipment to any point within the State, or who delivers or causes to be delivered to any express agent or railroad agent or other corporation for shipment to any point without the State, any fruit or fruits, either fresh, cured or dried, that is infested with insect pests or diseases injurious to trees, shrubs, plants, fruits or vegetables."

This act amends previous acts with reference to horticulture and creates a board of horticulture, to consist of six members, to be appointed by a board consisting of the governor, secretary of State and State treasurer. One member of said board shall represent the State at large and shall be president and executive officer of the board, and one member to represent each of the five districts into which the State is divided. The qualifications required of the district members of said board are that they shall be residents of the district for which they are appointed, that they shall have knowledge of, and practical experience in, horticulture and the industries connected therewith, and shall be engaged in practical horticulture during their incumbency of the office of commissioner. Their term of office is four years, and it is made the duty of the president to visit, at least once a year, every district, and examine the orchards, nurseries and work of the district commissioners, and ascertain whether or not the law and regulations of the board are being properly executed. He must personally in-

spect most of the orchards during the fruit-growing season, and see that spraying is done as is required by the regulations of the board, wherever insects, pests or diseases, injurious to tree or fruit, are to be found. He is to visit the principal fruit shipping points during the shipping season, inspect the fruit shipped, and prevent the shipment of insect and pest-infected fruit. He is to give public notice, through the press, of the time of his visit to each county one week in advance of his coming, receive complaints of fruit growers, and give them printed or oral instructions regarding the destruction of pests, and other information, including proper methods of handling, packing and shipping fruit. When requested by an association or a number of fruit growers he shall, if possible, visit or attend their meetings and aid them in the organization of associations beneficial to the growing and marketing of fruits. He shall make an annual report to the appointing board of the general condition of the fruit interests of the State and success of the commissioners in the work of exterminating pests and executing the law. (Laws 1899, p. 55.)

PENNSYLVANIA.

It shall be unlawful for any person to keep any orchard or nursery tree infested with yellows, black knot, rosette, or pear blight; or any orchard or nursery trees infested with San José scale; or to sell or ship any of the fruit thereof, except plum, cherry and pear, that both tree and fruit so infected shall be subject to destruction as public nuisances. No damages shall be awarded for destroying such diseased trees or parts of trees or fruit.

It shall be the duty of each owner to destroy such trees or fruit, but it shall be sufficient to extinguish San José scale with effective insecticides.

Local commissioners are provided for in township, borough or city, whose duty it shall be to investigate, and if diseases are

found, to notify the owners of the facts found to exist, with an order to treat with insecticides or effectually uproot and burn such trees or parts of trees as said commissioner shall order within five days; and in case of infected fruit such person shall immediately cause its destruction.

On neglect or failure to comply with the orders of the commissioners, it shall be their duty to employ help to remove and destroy diseased trees and fruit at the cost and expense of the city, borough or township, but the amount may be recovered from the negligent owner. (Laws 1899, No. 77.)

TEXAS.

The officers of the agricultural and horticultural college are authorized to employ one or more expert entomologists, who shall devise means of destroying the Mexican boll weevil, boll worm, caterpillar, sharpshooter, chinch bug, peach bug, fly and worm and other insect pests. (Laws 1899, chap. 10.)

The above emergency measure was passed on account of great destruction of the cotton and peach crops over large sections of the State.

UTAH.

Three members constitute the board of horticulture and each is assigned a district. For the purpose of preventing the introduction and spread of contagious diseases, insects, pests or fungus growths among fruit or fruit trees, and for the prevention, treatment, cure and extirpation of pests, and for disinfection of grafts, scions, orchard debris, boxes, packages, etc., said board shall promulgate rules which shall be a notice to all whom it may concern.

It shall be the duty of every owner or occupier of any orchard, vineyard or nursery to disinfect all fruit trees, bushes or vines

that are infested with any kind of fruit-destroying diseases or insects, etc., by spraying with solution or disinfectant of sufficient strength to destroy such diseases or insects; provided, that no trees, vines or bushes shall be sprayed while in bloom.

Any person spraying trees for hire shall obtain a certificate from the board.

In every county where five thousand fruit trees are growing the board may appoint county fruit tree inspectors and deputies, all of whom shall work under the board, to carry out its regulations.

It shall be the duty of the board and the several inspectors, to cause an inspection to be made of any orchards, nurseries, trees, plants, vegetables, vines, or any fruit-packing house, store room or other place, and if found infested with diseases liable to spread to other localities, they shall notify the owner or person in charge and shall require said persons to eradicate such diseases, or treat the places and contents within a certain time, which notice shall contain directions for the application of approved remedies.

Infested places are declared a public nuisance, and if not abated as ordered in the formal notice, the board shall cause it to be done, and the expense shall be a county charge, and any sums so paid shall become a lien on the property or premises.

Any inspector shall, upon evidence that nursery stock is imported or offered for sale, cause a careful examination to be made of such stock. All, or any nurserymen or persons, shall report to the county inspector any receipt of trees from points outside the State. (R. S. 1898, and Laws 1899, chap. 47.)

VERMONT.

Any town may appropriate a sum of money to be expended in exterminating worms on shade, ornamental and forest trees in public parks or highways.

The selectmen have charge of the treatment and the expenditures. (Laws 1898, No. 156.)

VIRGINIA.

The board of control of the Virginia Agricultural Experiment Station is created a State board of crop pest commissioners, whose duty is to appoint a State entomologist and pathologist, who shall act as State inspector to eradicate and prevent the spread of San José scale. The said board shall provide rules and regulations under which the inspector or his assistants shall proceed to control, eradicate, destroy and prevent the dissemination of pests.

The board shall have power to provide quarantine rules against the sale and transportation of all nursery stock within or entering the State, where the same is found to be infested with injurious diseases.

Provision is made for the annual inspection of all nursery stock grown within the State, prior to September first, by the inspector or his assistants, who shall issue a certificate of freedom from insect pests and plant diseases to the owners of all nurseries found entitled to the same, and they shall further provide regulations under which nursery stock brought into the State may be sold under the above provided certificate. (Laws 1900, chap. 109.)

WASHINGTON.

The commissioner of horticulture is appointed by the governor and it shall be his duty to have supervisory direction over the horticultural industries of the State, to enforce laws relative to importation, transfer and sale of fruit trees, plants or nursery stock, and to give instruction to fruit culturists regarding the cultivation, and the extermination of fruit pests.

Provision is made for the appointment of a county fruit inspector, who shall report monthly to the commissioner.

No person shall engage in the business of selling or importing fruit trees, plants or nursery stock, without first having obtained a license to carry on such business in the State. Application for

license must be made to the commissioner, together with a bond in the sum of one thousand dollars, conditioned that the principal and his agents will obey the law, and that the said principal will pay the cost of inspection and destruction of all infested nursery stock imported into or sold within the State.

Every person licensed to do business under this act shall notify the commissioner of his intention to ship within the State, or to import nursery stock twenty-four hours before the day of shipment.

For the purpose of preventing the introduction and spread of contagious diseases, fruit pests, spores and fungus growths among fruit trees and other nursery stock, and for the disinfection and cure of fruit tree diseases, the commissioner shall prescribe such remedies as he shall deem best and publish them in bulletins for distribution.

County inspectors are authorized to compel disinfection of any stock found infested. It shall be a misdemeanor to bring any infested nursery stock into the State.

If an inspector shall find any nursery, orchard, garden or other place or material infested with insects or fungus growths, larva or spores injurious to the fruit interests, he shall notify the owners or occupants of the fact, and shall direct the manner in which the same shall be disinfected.

If said owner shall not disinfect the premises in the manner ordered within the specified time required, then the inspector shall disinfect the infected premises, and the cost shall be a lien thereon. If the infected property be transportable it shall be disinfected within twenty-four hours, and if the owner shall fail to comply with orders of the inspector then the inspector shall destroy such infested materials, as fruits, boxes, baskets, etc., by burning the same. Appeals may be made to the commissioner of horticulture and his decision shall be final. (Laws 1899, chap. 127.)

WISCONSIN.

"The director of the agricultural experiment station of the University of Wisconsin is authorized to inspect, through his agent, any nursery, fruit or garden plantation, or any unplanted or heeled-in nursery stock in this State," that he suspects of being infested by San José scale or other injurious insects and fungus diseases, * * *."

The duties of the agent of the said director are specified to be that if he finds on inspection of any nursery premises or packing ground, etc., any of the aforesaid San José scale, or other injurious insect and fungus diseases, he is to notify the owner or person in charge of such premises, in writing to that effect, and if such owner, after receiving such notice, shall ship or deliver any trees, vines, shrubs, or plants affected as aforesaid, he shall be subject to the payment of a penalty or forfeiture.

"Whenever any trees, shrubs, plants or vines are shipped into this State from another State, county or province, without a certificate plainly fixed on the outside of the package, box, or car containing the same, showing that the contents had been inspected by a duly appointed State or government officer, and they appear free from San José scale and other injurious insects and fungus diseases," the fact must be reported to the said director by the railway, express or other persons carrying the same, with the statement of the source from whence such articles came, and the party to whom they are addressed.

"Any person growing or offering for sale in this State any nursery stock known to be infected with the San José scale and other injurious insects and fungus diseases, shall, upon the demand of the said director, furnish within twenty days, a list of all persons, as far as to him known, to whom he has sold or delivered any such stock, together with the post-office address of each of such persons so far as to him known; such information shall be preserved and be for the sole use of the said director and his agent in carrying out the provisions of this act."

An official certificate shall be issued by said director "to the owner of any nursery after the nursery stock therein has been properly inspected and found to be apparently free from San José scale or other injurious insect and fungus diseases to that effect, and good for a period not to exceed one year, upon the payment of five dollars for each ten acres of land owned or leased by said nurseryman in this State that is devoted wholly or in part to nursery stock, grown for sale purposes; and such owner may apply to said director for inspection of his premises for the purpose of securing such certificate, and the said directors shall cause such inspection to be made, within three months after receiving such application, unless such inspection shall be delayed by winter weather, but no such certificate shall be issued covering only a part of the nursery stock owned by one person, nor to cover nursery stock received after such inspection was made; and any such certificate may be canceled by the said director upon the discovery in such nursery of the San José scale or other injurious insects and fungus diseases."

Application may be made to the said director by any nurseryman holding a valid certificate, issued as prescribed in the preceding section for official labels or tags, "for which the said director may charge a sum not to exceed thirty cents per hundred, said labels or tags certifying that the package or bundle of nursery stock to which they are attached are from nursery stock that has been officially inspected and found apparently free from San José scale or other injurious insects and fungus diseases; but no such tags or labels shall be used for stock not covered by the aforesaid certificate nor after such certificate has expired or been canceled; and no person shall attempt to imitate or counterfeit such tags or labels."

A report of all operations carried out, under the provisions of this act, is to be made by the director of the experiment station to the secretary of State on the last week day of May of each year. (Chap. 180, Laws 1899.)

WYOMING.

"Sec. 68. Whoever unlawfully removes, destroys, cuts or girdles any shade tree, fruit tree, or fruit-bearing bush or shrub, or carries off, removes or in any wise injures the protecting bars placed for the protection of such tree, bush or shrub, shall be fined." (Chapter 71, Laws 1897.)

CANADA.

It shall be the duty of every occupant of land, or if the land be unoccupied it shall be the duty of the owner to cut out and burn all black-knot found on plum and cherry trees so often each year as it appears and to cut down and burn any peach, or other trees infected with yellows, and to destroy all the fruit so infected.

The council of any city, town or township may appoint inspectors to enforce this act, to locate infected trees and notify the owners.

Fruit infected with yellows shall not be shipped. (R. S. O., 1897, chap. 280.)

"THE NOXIOUS INSECTS ACT."

Upon the recommendation of the minister of agriculture the lieutenant-governor may make such regulations for the prevention and destruction of insects injurious to trees, shrubs and other plants as he may deem advisable.

Every municipal council adopting this act may appoint inspectors whose duty it shall be to inspect all orchards, and to enforce the provisions of this act and the regulations made thereunder.

In case the occupant or owner of any lot neglects or refuses to comply with this act, the inspector may cause the necessary work to be done, and the cost thereof shall be entered on the collector's roll against such owner.

Under regulations of this act it is made the duty of every occupier of a lot or the owner to place bands upon the orchard trees; upon all bearing apple trees and pear trees and upon all orchard trees of bearing age within forty feet of such bearing trees.

The bands shall be made of "burlap" or "sacking" not less than four inches wide and of three inches in thickness, and shall be securely fastened between the crotch of the tree and the ground.

These bands shall be removed and all larvæ of codlin-moth thereon destroyed and the bands replaced at intervals of not more than two weeks during June, July and August. (63 Vict., chap. 47.)

No person shall import into the provinces any plant infested with San José scale.

No person shall keep or have or offer for sale any plant infested with San José scale.

No owner of any nursery shall send out any plants without the same being first fumigated by hydrocyanic acid gas, in accordance with regulations prescribed by the lieutenant-governor in council, and no person shall sell or deliver any plant sent out from any nursery unless said plant shall have been previously fumigated in accordance with this act.

In case an inspector finds scale in any nursery and so reports it to the the minister, the minister may thereupon inform the owner of said nursery of the existence of scale in his nursery, and no plant shall be removed until it shall be deemed safe to do so.

Plants infested with scale shall be burned, and an estimate of the value shall be made in the reports of the inspector.

In the case of an orchard or collection of plants, if the inspector finds scale on plants located in several different parts of the orchard the minister may direct that all plants in such orchard, or in such parts thereof, shall be destroyed.

The word *plant* in this law is declared to mean any tree, shrub or vine, and the word *scale* to mean the San José scale, and may be made to mean any scale insect.

Notwithstanding anything in this act the lieutenant-governor may adopt regulations for the treatment of infested plants by spraying, washing or fumigation. (61 Vict., chap. 33; 62 Vict., chap. 35; 63 Vict., chap. 129.)

By an order in council of January 5, 1901, all importations of nursery stock are permitted to be entered at the custom ports only of St. John, N. B., Niagara Falls and Windsor, Ont., and at Winnipeg, Manitoba, between the fifteenth of March and the fifteenth of May in the spring, and from the seventh October to seventh December in the autumn; and at Vancouver, B. C., during the winter months only from fifteenth October to fifteenth of March, at which ports they will be thoroughly fumigated with hydrocyanic acid gas by a government official with the most approved methods.

All shipments will entirely be at the risk of the consignees.

All stock which when received is immature or too far advanced for safe treatment will be refused entry.

Commercial Fertilizers.

The enormous consumption of commercial fertilizers in the United States and the ease with which liberal frauds can be practiced in the manufacture and dealing in these commodities has led thirty-one States to enact laws authorizing official inspection. The following briefs of many laws are given, and full information on the subject of penalties, prosecutions and methods may be had by referring to the dates and chapters at the end of each section:

ALABAMA.

It shall be the duty of the commissioner of agriculture to obtain samples of each and every brand of fertilizers sold or exchanged, or offered for sale or exchange in this State, for each season in which such fertilizers are offered for sale, and cause such samples to be analyzed by the State chemist; and make publication of such analysis not later than August first of each year. (Laws 1891, No. 205.)

ARKANSAS.

This act provides that before any fertilizer, having a value of over ten dollars per ton, shall be offered for sale, samples shall be submitted to the State chemist, giving name of brand and place and name of manufacture, and said chemist shall grant a certificate setting forth the analysis. Every package shall have attached to it a guaranteed analysis, substantially corresponding to the said certificate. The chemist shall receive for analyzing each brand a fee of fifteen dollars, but any purchaser may have samples analyzed free of charge.

If any fertilizers shall be found to differ materially from the constituents named on the package the manufacturer shall be liable to indictment. (Laws 1895, act 82.)

DELAWARE.

"The State chemist is hereby required when any person or persons purchasing any fertilizer, sold in this State and composed of one or several ingredients, from any manufacturer or vendors, for their own use, and who, themselves, the purchasers, are citizens of this State, submit to said State chemist samples of any such fertilizers for analysis in the manner prescribed in section 6 of chapter 438, volume 17, Laws of Delaware, to make any and all such analysis for the sum of one dollar, to be paid by such purchaser; and that the said State chemist shall receive the sum of one dollar, only, when he makes any analysis mentioned in section 10 of this act, and this act shall not be construed to mean that said State chemist is to be paid one dollar for each ingredient in any fertilizer mentioned in section 1 of this act, and so analyzed by him. (L. 1899, ch. 213.)

FLORIDA.

This act amends section 896, Revised Statutes of Florida, relating to the inspection of fertilizers, and requires that every bag, barrel or other package of commercial fertilizer sold in, or imported into this State, shall have plainly stamped thereon the number of net pounds of fertilizer in the package, the name, brand and trade-mark under which the fertilizer is sold, the name and address of the manufacturer, and chemical analysis, stating the percentage of ammonia, of potash, soluble in water, of available phosphoric acid, and the source from which the same is derived, and insoluble phosphoric acid; also percentage of moisture contained therein, and all other ingredients of which it is com-

pounded. Sheriffs of counties are authorized and it is made their duty to seize and sell at public sale, each and every bag, barrel or other package of commercial fertilizer manufactured, imported into, or sold in this State not having securely attached the tag or label mentioned in this section; *provided*, that if the owner shows to the satisfaction of the sheriff that such tag or label has been attached, and that the same has become detached, he shall release the same without cost to the owner. All fertilizer shipped in bulk to consumers shall be subject to the penalties provided in this section upon any attempt to evade the payment of such tax. (No. 46, p. 131, Laws 1895.)

GEORGIA.

It is unlawful to sell any commercial fertilizers in this State unless the grade of same is branded upon each sack or package thereof in letters of not less than one inch.

"The grades of such fertilizers shall be divided into three, to wit: 'High grade', which shall contain not less than *fourteen* per cent. of plant food; 'standard grade', which shall contain not less than *twelve* per cent. of plant food, and 'low grade', which shall contain not less than *ten* per cent. of plant food." This act takes effect August 1, 1898. (No. 358, p. 115, Laws 1897.)

This act amends section 1 of No. 358, Laws of 1897, by striking out the word "complete" so that it shall read as follows: "That from and after the passage of this act it shall be unlawful to sell any commercial fertilizers in this State unless the same is branded upon each sack or package thereof in letters not less than one inch; *provided*, that this act shall not be construed as applying to cotton seed meal and German kainit and muriate of potash; and that said act shall not take effect until the first day of August, 1899." (No. 170, p. 100, Laws 1898.)

The commissioner of agriculture shall appoint inspectors. (Laws 1890, p. 142.)

Each purchaser may have samples of fertilizer reserved for the chemist to analyze. Should analysis show that said sample was not equal to the guaranteed constituents, purchaser will not be liable for payment. (Laws 1890, p. 143.)

All fertilizers and chemicals for manufacturing the same, and all cotton seed meal offered for sale shall have branded or attached to each bag, barrel or package the guaranteed analysis showing percentage of valuable constituents. The analysis so placed upon or attached to any fertilizer shall be a guarantee and binding on the manufacturers, agent or dealer. The sale of specified chemicals is forbidden if below certain named standards of purity. All persons who intend to sell chemicals, fertilizers or cotton seed meal shall make a statement to the commissioner of agriculture, giving name of each brand, name and place of each manufacturer, number of tons of each brand, number of tags required, name of consignee, also number of pounds contained in each bag or receptacle, and at the time of request for tags forward a fee of ten cents per ton as an inspection fee; whereupon the commissioner of agriculture shall issue tags to the party applying, who shall attach a tag to each package, which when so attached, shall be *prima facie* evidence that the seller has complied with the law. Tags shall only be used in the current season.

It is unlawful to sell any fertilizer, chemical or cotton seed meal unless registered and tagged. Inspectors shall see that all fertilizers, chemicals and cotton seed meal, wherever sold in this State, are properly tagged. They may take samples for the commissioner of agriculture, who shall make such rules for analysis and sale of fertilizers, chemicals and cotton seed meal as his judgment dictates, if not inconsistent with this act. All contracts for sale of these commodities not in accordance with this act are void and all persons not complying with this act commit a misdemeanor. (Laws 1891, pp. 144, 145, 146.)

INDIANA.

This act is to regulate the manufacture and sale of commercial fertilizers and to prevent the manufacture and sale of adulterated commercial fertilizers and prescribes penalties.

It shall be the duty of the State chemist to inspect and analyze fertilizers and issue certificates, and he may obtain samples from any package of commercial fertilizers offered for sale or found in the State. He shall prescribe and enforce such rules and regulations relating to fertilizers as he may deem necessary. (Laws 1899, chaps. 33, 75.)

KENTUCKY.

This act is to regulate the sale of fertilizers in this commonwealth and is an amendment to a previous law on this subject.

It requires that the seller of any commercial fertilizer shall furnish a sample of the same to the agricultural experiment station each year for analysis before it is sold, offered or exposed for sale. Said sample to be furnished under prescribed rules and regulations.

The director of the experiment station shall issue labels or tags on which shall be printed the name and address, together with the minimum percentages of fertilizer, and every bag or package sold or offered for sale shall have a tag attached. Any person not a dealer or agent for the sale of a fertilizer who may purchase any commercial fertilizer may have an analysis by the experiment station free of charge.

A label attached, as required by this law, shall be accepted as a guarantee that the fertilizer contains the essential ingredients indicated on the tag, and penalties are prescribed if the fertilizer is found to contain less than the indicated percentum of ingredients as per label.

The director shall annually analyze at least one sample of every fertilizer sold or offered for sale in the State. (Laws 1898, chap. 181.)

LOUISIANA.

This is an act "to carry into effect article 306 of the Constitution of the State of Louisiana and to define the duties and powers of the State board of agriculture and immigration and those of the commissioner of agriculture and immigration, in relation to the suppression of adulteration and fraud in the sale of commercial fertilizers."

The State board of agriculture and immigration is authorized to control the sale and manufacture of fertilizers and suppress the adulteration of the same. Samples of fertilizers for sale in this State are to be submitted to the commissioner of agriculture for inspection and analysis under prescribed rules and regulations, among which is a requirement that any manufacturer or dealer in, or any person soliciting orders for the sale of commercial fertilizers shall submit with fair samples of the same a written or printed statement setting forth the amount of the named ingredients which he or they guarantee said fertilizers to contain (1) nitrogen; (2) soluble phosphoric acid; (3) reverted phosphoric acid; (4) insoluble phosphoric acid; (5) potash. The party making this statement may also set forth any other ingredients which his fertilizer may contain which shall be considered as embraced in the guarantee above stated. An inspection fee of twenty-five cents per ton shall be paid by the seller upon any fertilizer sold for use in this State. Certificates that there has been a compliance with the foregoing section shall be furnished without any additional charge therefor by the commissioner of agriculture, after an examination by him made, and additional rules and regulations are prescribed in this section with regard to the manufacturing, dealing in, selling or soliciting orders in this State.

Circulars are to be issued by the board of agriculture, setting forth the brands of fertilizers for sale in this State at the opening of each season, and tags are to be furnished by the commissioner, to be attached to package containing fertilizers that

have been inspected, the said tags to have printed thereon the word "Guaranteed," with the year or season in which they are to be used, and a fac simile of the signature of the said commissioner, and a fee of twenty-five cents is required for a sufficient number of tags to tag a ton of such commercial fertilizer. It is made the duty of persons selling fertilizers to cause such tags to be attached and a penalty is fixed for selling fertilizers that have not been tagged, and there is also a penalty for counterfeiting said tags. Packages containing fertilizer, etc., are to have printed on them the percentage of valuable ingredients contained therein, to facilitate the analysis by the commissioner, and a penalty is fixed for omitting to comply with the above. Commissioners are authorized to seize any fertilizers sold in contravention of this act, and the proceedings in such cases are specified. The commissioner is authorized to obtain samples for analysis and to publish such analysis; the sample of fertilizer to be drawn from package, in the presence of purchaser, to submit to the commissioner for analysis. Contracts made for the sale of fraudulent fertilizer shall be null and void. Rules and regulations are to be prescribed by the commissioner for the inspection of fertilizers. The director of the several experiment stations of the State shall be the official chemist of the State board of agriculture. (No. 126, Laws 1898.)

MAINE.

Every manufacturer, company or person who shall sell or offer to sell any commercial fertilizer, the price of which exceeds ten dollars per ton, shall affix to every package a true statement certifying the number of pounds, the name or trade-mark, name and place of manufacture or shipper, and an analysis stating the per cent. of nitrogen, or its equivalent in available ammonia, of potash, of phosphoric acid in available form; they shall also file annually with the director of the Maine Agricultural Experiment Station a certified copy of a statement of the foregoing, and said

statement shall be accompanied by a sample of the brand of fertilizer, to which an affidavit shall be affixed, showing that the fertilizer contains the named percentage of ingredients claimed. The director shall analyze said samples and publish the results. Fees for analyzing shall be paid to said director, and the law defines the method to be pursued in handling said samples, and the penalties for a violation are given.

Heavy fines are imposed on those selling or manufacturing any fertilizers that contain a less percentage than the implied guarantee as indicated by the tags. (1897, ch. 197.)

MARYLAND.

1. "The term 'fertilizer', as used in this article, shall be held to mean any commercial fertilizer, or any article, substance or mixture sold, offered or exposed for sale for manurial purposes within this State, of which the selling price shall be more than ten dollars per ton of two thousand pounds. The term 'brand' shall be held to mean the name under which the commercial fertilizer is sold, together with the statement of the percentage of valuable ingredients contained therein. The term 'State chemist' shall mean the professor in charge of the chemical department of the Maryland agricultural college, who shall be ex officio State chemist."

2. The following are the conditions which must be complied with before any fertilizer is sold, offered or exposed for sale within the State: The importer, manufacturer, manipulator, dealer or agent shall take out a license for the sale of fertilizer, said license to be rated upon the number of brands contemplated to be sold, at the rate of fifteen dollars for each brand, to be prepared and furnished by the comptroller of the treasury, to be issued at any time, and to be good until the first day of February following, provided that where a license has been taken out, as is required afore-

said, it will not be necessary for the representative or agent of the above-named manufacturer, etc., to do so; and every bag, barrel or package of fertilizer, and every parcel or lot, if sold in bulk, must bear in legible print, or be accompanied by a clear and true statement of the net pounds of fertilizers in the said package or lot, the name, brand or trade-mark under which the fertilizer is sold, the name and address of the importer, manufacturer or manipulator, the place where manufactured or manipulated, and a chemical analysis stating the percentum of the minimum, and only the minimum contained therein, of nitrogen, or its equivalent in available ammonia, of potash soluble in distilled water, and of available phosphoric acid.

4. Unlicensed dealers are required to send their names, with post-office address and the name of the kinds, brands and trademarks, and the names of the manufacturer of each fertilizer sold or proposed to be sold, to the agricultural college.

5. The agricultural college is required to analyze, without cost or charge, all samples of fertilizers sent to it for the purpose by any person or persons purchasing or procuring the same in this State for his or their use or uses, provided, such persons are not interested in the analysis desired other than as consumers, of which affidavit shall be made and shall accompany each sample or brand, said samples to be sent said college free of transportation, and it is the duty of the college to procure samples of all fertilizers sold and used in this State, as far as practicable, in every year, for analysis, and the said college is required to send the result of every sample of fertilizer to the person sending the same and to publish from time to time the results made by the said college, and to state the commercial value in dollars and cents of the fertilizers so analyzed, per ton of two thousand pounds. Such value to be based upon the analysis made by the college, and upon a standard of valuation to be ascertained, fixed and published by said college, after conferences with the proper officials of adjacent States.

6. The manner of procuring and sending samples for analysis to be governed by certain rules and regulations, is prescribed by this section of the act.

8. Provision is made in this section for cases where the purchaser of fertilizers is injured or defrauded by labels or statements, and he may recover from the seller or sellers thereof in an action for debt an amount equal to the purchase-money of said fertilizer and cost of suit, or in case the purchase is made of any agent of any person or persons, residing outside the State, he can proceed as now provided by law in case of nonresidents or absconding debtors.

9. It is deemed a misdemeanor to use the trade-mark of another or adulterate fertilizers.

10. "This article shall not affect parties importing, manufacturing or manipulating fertilizers for their own use, if not sold or disposed of, nor shall it apply to substances and materials sold in bulk to manufacturers or manipulators of fertilizers, nor shall it prevent the buyer and seller from making contracts in reference to the price to be paid, dependent upon the composition or quality of the fertilizer contracted for, but no arrangement or agreement, verbal or written, made by or between any seller and buyer of fertilizer in this State, for the purpose of exonerating the seller or manufacturers from liability for any violation of any of the provisions of this article, shall exempt any person from such liability."

MISSISSIPPI.

A privilege tax is levied on fertilizing companies as follows:

"On each fertilizing company employing a capital of ten thousand dollars or less, twenty-five dollars."

"On each fertilizing company employing a capital of over ten thousand dollars, and not over twenty thousand dollars, fifty dollars."

"On each fertilizing company employing a capital of over twenty thousand dollars, and not over thirty thousand dollars, seventy-five dollars."

"On each fertilizing company employing a capital of over thirty thousand dollars, one hundred dollars." (Chap. 5, Laws 1898.)

This act amends section 2065 of the Annotated Code of 1892, chapter 48, as follows:

"After the words cotton seed products, the words castor pomace, shall be added, so that the bill shall read:

"Definition of the term fertilizers: The term fertilizers as used herein includes all substances, chemicals and compounds, commonly known as commercial fertilizers, and all manures, except animal excrements, cotton seed and unmixed cotton seed products, castor pomace, whether matured or artificial products." (Chap. 65, Laws 1896.)

Sec. 2066. "The professor of chemistry at the agricultural and mechanical college is State chemist, and all fertilizers shall be analyzed by him, and his analysis, stating the percentage therein of nitrogen in an available form, of potash soluble in water, and of phosphoric acid in an available form, soluble or reverted, and of insoluble phosphoric acid, shall be posted and kept posted in a conspicuous manner at every place where fertilizers are sold."

Sec. 2067. The certificate of the manufacturer or producer of every brand of fertilizer shall also be posted, giving the component parts and valuable elements, with a guarantee that it does not contain leather in any form, and also the place of the manufacture or production, the name and address of the manufacturer or producer, and the name and trade-mark of the brand, and such certificate and the prescribed tag shall be posted on or attached to every package of fertilizers sold.

Sec. 2068. "Before offering any fertilizer for sale the manufacturer, producer or seller shall furnish to the State chemist a certificate of the manufacturer or producer, showing the component parts thereof and a fair sample of it, not less than one

pound, sealed up in a glass jar; and the chemist shall analyze it, and give his certificate thereof and shall furnish the necessary number of tags. He shall also, from time to time, secure samples from packages offered for sale or sold, analyze the same, and record the analysis."

Sec. 2069. "The State chemist shall also analyze all fair samples of fertilizers properly certified and prepared which may be furnished to him by farmers and other purchasers for use, free of charge, and shall give a certificate thereof."

Sec. 2070. "The certificate of analysis of the State chemist shall be evidence of the percentage of valuable elements in any fertilizer analyzed by him."

Sec. 2071. "The State chemist shall have prepared a sufficient number of tags of suitable material and form, with proper fastenings for attaching to packages, and having printed thereon the word 'guaranteed', with the year of sale, number of the tags and a fac simile of his signature. Any person who shall counterfeit a fertilizer tag, or who shall use one not sold to him by the State chemist, or who shall use one a second time, shall be guilty of forgery."

Sec. 2072. "The State chemist shall charge and collect for the analysis of each brand of fertilizer the sum of fifteen dollars, and for enough tags for one ton of fertilizers, thirty cents."

Sec. 2074. "The certificate of the State chemist shall be good for one year, if no fraud or deception be practiced in obtaining it, and an analysis of each brand of fertilizer must be made every year or season."

Sec. 2075. "The State chemist shall record, in a suitable book, the result of every analysis of a fertilizer made by him, specifically showing the percentage of valuable elements, the date of the analysis, the name and residence of the manufacturer or producer, the name of the brand and place of manufacture or production and the number of tags issued for each brand."

Sec. 2076. "Every fertilizer shall be sold and delivered in a barrel, box, sack or other package convenient for handling and suitable for having attached thereto *the certificate* and tag."

Sec. 2077. "Every manufacturer, owner or agent selling any spurious or adulterated fertilizer; or any fertilizer which shall lack materially in a valuable element represented to be therein shall be liable to the person injured for quadruple the price received or agreed upon for the article sold." (Chap. 48, A. C., 1892.)

Section 2078 provides that if any spurious or adulterated fertilizer shall be sold, offered or kept for sale which has not been analyzed by the State chemist and tagged, or which shall lack materially any of the valuable elements specified in the certificate of analysis, the whole of that shipment of fertilizer shall be forfeited to the county wherein the same may be, and that, whether the fraud be perpetrated by the manufacturer or owner, or by an agent or servant or other person having control of it; and all contracts made for the sale of it, shall be void, *ab initio,* wherever stipulated to be performed.

Upon an affidavit made by the State's chemist or other citizen that untagged or other fraudulent fertilizer is being sold, it shall be seized by the sheriff or other competent person, under the provisions of this act and held subject to the action of the court. "And upon the order of the court the fraudulent or untagged or unadulterated fertilizer becomes the property of the county wherein the same may be." (Chap. 66, Laws 1896.)

MISSOURI.

Every person intending to sell fertilizers worth over ten dollars per ton shall submit samples of each brand to the director of the State experiment station. The director shall analyze each sample and print the result in the form of a label which shall set forth the name of the manufacturer and place, the brand of the fertilizer and the essential ingredients contained therein, together with a certificate setting forth that such analysis is true, and he shall place on each brand the money value of such fertilizer.

The director shall furnish each corporation or person, who intends to sell fertilizers, with such labels, and a label must be attached to each and every lot sold or offered for sale. The director shall receive a fee of ten dollars for each brand analyzed, and one dollar per one hundred for the labels.

The director is authorized to take samples wherever found and to analyze the same, to enforce this law and also to analyze samples for purchasers of fertilizers in the State without charge. (Laws 1893, chap. 171.)

NEW YORK.

See complete laws in other pages of this volume.

NORTH CAROLINA.

When analysis shows the presence in a commercial fertilizer of hair, hoof meal, horn, leather scraps or other deleterious substances not available for plants, but which contain ingredients that go to make up the required guaranteed analysis, publication shall be made in the bulletin of the experiment station showing the result of such analysis and all such commercial fertilizer shall be seized and condemned as provided by law. (Laws 1897, chap. 286, amending section 2194 of the Code.)

The State board of agriculture may adopt such regulations as will enable them to enforce this law.

Each bag, barrel or other receptacle shall be tagged with a label furnished by the board.

Twenty-five cents per ton shall be paid for the analysis of fertilizers sold in the State.

The labels shall show on each package the per cent. of chemical constituents of each ingredient, and if the contents are found to contain less than the implied guarantee the fertilizer may be confiscated. (Laws 1891, chap. 9.)

Pure cotton seed meal is exempt from the use of labels for shipping purposes required for other fertilizers. (Laws 1893, chap. 462; Laws 1899, chap. 377.)

OHIO.

Any person who shall offer for sale any commercial fertilizer shall affix to every package a printed certificate, stating the number of pounds in the package, the name or trade-mark, the name of the manufacturer and the place of manufacture, and a chemical analysis stating the percentage of nitrogen, or its equivalent in ammonia in an available form, of potash soluble in water, and of phosphoric acid in an available form (soluble or reverted), as well as the total phosphoric acid.

Before any commercial fertilizer is sold or offered for sale, the manufacturer or importer shall file with the secretary of the Ohio state board of agriculture a certified copy of the certificate referred to, and shall deposit a sample of the fertilizer, accompanied with an affidavit that it is a fair, average sample. The manufacturer or agent for each brand shall pay an annual license fee of twenty dollars.

At least one analysis of each brand of fertilizer sold shall be made yearly by the board of agriculture, and the secretary shall publish a report of all such analysis made.

Any person failing to comply with this law, or selling fertilizer not substantially like the certified statement placed on each package, is liable to a fine and also for damages sustained by any purchaser.

The secretary of the board of agriculture may select two pounds of any fertilizer offered for sale in the State for analysis. (Ohio Statutes, 4446a-4446i.)

OREGON.

This is an act prescribing the duties of the dairy and food commissioner with reference to the sale of unwholesome food, drink, medicine and fertilizers, and section 15 of said act reads as follows:

"Every box, barrel, keg or other package of any substance, or any quantity of any substance in any shape or form whatever, sold or offered for sale as a commercial fertilizer, shall have attached to it in a conspicuous place a label containing a certified analysis made by the State chemist from a fair and true sample of the substance to which such label is attached."

"The term 'commercial fertilizer,' as used in this act, shall be taken to mean any and every substance imported, manufactured, prepared or sold for fertilizer or manurial purposes, except barnyard manure, lime, marl, wood ashes and plaster." (Laws 1899, p. 50.)

RHODE ISLAND.

Every lot of commercial fertilizer sold or offered for sale shall be accompanied by a label stating the number of pounds, the name, brand or trade-mark under which it is sold, the name and address of the manufacturer or importer, and a chemical analysis stating the percentage of nitrogen, of potash (K_2O.) soluble in water, and of soluble, reverted, and insoluble phosphoric acid (P_2O_5).

When fertilizers are sold in bulk for use of farmers in this State, a statement must be sent to the board of managers of the Rhode Island agricultural college, and mechanical arts, giving the name of the goods so shipped, and accompanied by an affidavit from the seller giving the percentage of the several ingredients guaranteed, together with a list of agents and a sample of said fertilizer.

No person shall sell any pulverized leather, raw, steamed, roasted, or in any form, as a fertilizer, without an explicit certificate of the fact affixed to every package.

The board of managers may have samples of fertilizers, sold in the State, collected and analyzed and published, together with a statement of their value per ton, and shall prosecute every person violating this law.

The manufacturer, importer, agent or seller of any brand of fertilizer shall pay annually an analysis of six dollars for each fertilizing ingredient claimed to exist. (R. S. 1896, chap. 154, and Laws 1898, chap. 520.)

SOUTH CAROLINA.

This is an act to abolish the Department of Agriculture and the office of Commissioner of Agriculture, and to impose all their powers and duties on the Board of Trustees of "The Clemson Agricultural College of South Carolina," except the control of phosphate interests of the State. Section 4 of this act gives said Trustees the supervision of all laws respecting the sale of commercial fertilizers in the State. They shall appoint a special inspector or inspectors of fertilizers, and such other persons. (Laws 1890, No. 461.)

This is an act to punish frauds or misrepresentations in the manufacture, analysis or sale of fertilizers and commercial manures in this State, and reads as follows:

"Section 4. That hereafter any firm or corporation in this State who shall be guilty of short weight or fraud in the manufacture, preparation, analysis or sale of guanos, fertilizers or commercial manures, in this State, or who shall make any willful misrepresentation as to the manufacture, preparation, analysis or quality of such guanos, fertilizers or commercial manures, or who shall willfully fail to attach the tags, labels or stamps as now required by the General Statutes of the State," shall be guilty of a misdemeanor. (Laws 1890, No. 463.)

This is an act to further regulate the manufacture and sale of commercial fertilizers, and requires that manufacturers of fertilizers or commercial manures in this State, or any person or corporation offering the same for sale, shall on or before the first day of November of each year file with the Board of Trustees of "The Clemson Agricultural College of South Carolina," a true and correct copy of the printed label or stamp required to be printed upon every bag, barrel or other package of such fertilizer or commercial manure of the various brands which the said person or corporation proposes to offer for sale within the State during the next succeeding twelve months; also a certificate showing the source from which the phosphoric acid, ammonia and potash guaranteed in each of said brands of fertilizer or commercial manure so to be offered for sale is derived; and also the commercial value of each and every ingredient contained in said fertilizer or commercial manure, to be ascertained as hereinafter provided, and the said persons or corporation shall furnish the said Board of Trustees of said College a true sample of each and every brand of fertilizer or commercial manure, of not less than one pound, intended to be offered for sale during the season, but no fertilizer or commercial manure, under any name or brand whatever, shall be offered for sale within the State until the foregoing terms shall be complied with. It is, however, provided, that any person or corporation may apply to and obtain consent of the said Board of Trustees to offer any other brand of fertilizer or commercial manure upon complying with all the requirements hereinbefore contained. The said Board of Trustees of said college is required, on or before the first day of October of each year, to publish the commercial value per pound and per unit of the various ingredients of a complete fertilizer, viz: available phosphoric acid, ammonia and potash, and the same shall be furnished to any firm or corporation interested in the manufacture or sale of commercial fertilizers and manures in this State upon application therefor. said valuation so ascertained shall be the guide by which parties selling fertilizers or commercial manures shall be governed in esti-

mating the commercial value thereof as hereinbefore required. The sworn certificate of the chemist of said college shall be *prima facie* evidence in any and all courts of this State of the analysis and commercial value of the fertilizers so analyzed.

"Any fertilizer or commercial manure offered for sale in this State proving deficient in any of its ingredients and if, by reason of such deficiency, the commercial value thereof shall fall three per cent. below the guaranteed commercial value of said fertilizer, it shall be deemed fraudulent, and a note or obligation given in payment therefor shall be collectable at law only for the amount of the actual commercial value as ascertained by the analysis, and the person or corporation selling the same shall be liable to the purchaser for such damages as may be sustained by reason of such deficiency."

It is deemed a misdemeanor for "any person or corporation to sell or offer for sale any brand of commercial manure in this State which contains ammonia derived from horns, hoofs, or leather, or which shall, upon analysis, fall three per cent. below the commercial value of said fertilizer or commercial manure, certified to the said Trustees of said college as hereinbefore provided." (Laws 1894, No. 330.)

All packages containing fertilizers or commercial manures, whether in bag, barrel or other package, offered for sale or delivered after sale in this State, shall have a printed label or stamp, which shall truly set forth the name, location and trade-mark of the manufacturer, also the chemical composition of the contents of such package, and the real percentage of any of the following ingredients asserted to be possessed, to wit: "Soluble and precipitated phosphoric acid, soluble potassa, ammonia, or its equivalent in nitrogen, together with the date of its analysis, and that the privilege tax has been paid, and on the opposite side (or end, as the case may be), of every such bag, barrel or other package there shall be another plainly printed label or stamp, or a brand in Roman letters, the letters to be not less than two

inches in length, giving the grade of each such package, according to the following schedule, that is to say: each package to be so labeled: "High grade," "Low grade" or "Standard," according to the following classifications: "High Grade.— The following analysis, guaranteed by manufacturers, to be branded High Grade: Dissolved bone or acid phosphate, without potash, guaranteed thirteen per cent. or over available phosphoric acid; acid phosphate, containing potash, guaranteed to contain twelve per cent or over of available phosphoric acid, with one per cent. of potash; ammoniated goods, guaranteed to contain eight per cent. or over of available phosphoric acid, three per cent. or over of ammonia and two per cent or over of potash."

"Low Grade — The following analysis guaranteed by manufacturer, to be branded Low Grade: Dissolved bone or acid phosphate, without potash, guaranteed to contain less than twelve per cent. of available phosphoric acid; acid phosphate, containing potash, guaranteed to contain less than eleven per cent. of available phosphoric acid, with one per cent. of potash, ammoniated goods, guaranteed to contain less than eight per cent. of phosphoric acid, two and one-half per cent. of ammonia and one per-cent. of potash."

"Standard — The following analysis, guaranteed by manufacturer, to be branded Standard: Dissolved bone or acid phosphate, without potash, guaranteed to contain twelve per cent. of available phosphoric acid; acid phosphate, containing potash, guaranteed to contain eleven per cent. of available phosphoric acid, with one per cent. potash; ammoniated goods, guaranteed to contain eight per cent. of available phosphoric acid, two and one-half per cent. ammonia and one per cent. of potash. Provided, Any manufacturer shall have the right to brand the grade of goods manufactured in either grade when the guaranteed analysis shows the ingredient is of same or equal commercial value, as the grades stated in the foregoing schedule; and any such fertilizer as shall be ascertained by analysis not to contain the ingredients and per-

centages set forth as above provided shall be liable to seizure and condemnation, and when condemned shall be sold by the said Board of Trustees for the exclusive use and benefit of the said Clemson Agricultural College, as provided in section 1114." The selling, offering for sale, or delivering after sale, or receiving any commercial fertilizer without having such label and stamps, as hereinbefore provided, attached thereto, renders the offender liable to a fine of ten dollars for each separate bag, barrel or package sold or offered for sale.

This act took effect August 1, 1898. (Laws 1898, No. 477.)

By this act, in section 1, "the Board of Trustees of Clemson Agricultural and Mechanical College, in order to prevent fraud and imposition in the manufacture and sale of fertilizers and fertilizing materials, shall cause fertilizers sold or offered for sale within the State, whether manufactured within or without the State, to be inspected to determine the agricultural value of the same as applied to farms, trucking gardens, orchards and crops grown within this State."

Section 2. Experiments are to be made by the said Trustees of said college with the several kinds of fertilizers and fertilizing materials offered for sale within this State, and shall cause the result of the use of said fertilizers and fertilizing materials to be reported and have said reports classified and published in the bulletins of said college.

Section 3. One or more persons or inspectors are to be appointed by said Trustees, who shall procure samples of said fertilizers and fertilizing materials, and forward the same to said college to be analyzed and experimented with, and perform such other duties as the Board may direct. The said Board of Trustees shall employ an analyst skilled in agricultural chemistry, and his duties are specified to be to analyze fertilizers and other material; carry on experiments on the nutrition and growth of plants and such other investigations as the Department may direct. He is to make regular reports to the said Department of all analyses and experiments made, which are to be published in bulletins.

Section 5. "There shall be a charge of twenty-five cents per ton on such fertilizers and fertilizing material, which shall be paid to the State Treasurer before the delivery to railroads, agents, dealers or consumers of this State, except on goods shipped in bulk to manufacturers for manufacturing purposes only. *Provided,* That said Board of Trustees shall have the discretionary power to exempt such natural materials as may be deemed expedient."

Section 6. Inspection tax tags or stamps shall be issued by said Board of Trustees, or their agent, to any person or persons, company or corporation presenting receipts or other evidences from the State Treasurer of the payment of sufficient funds to cover such issue, and the said Board of Trustees, or their agent, shall, before issuing such tags or stamps, mark, punch, or stamp each and every tag or stamp with such marks or stamps as they may adopt, showing that said tags or stamps have been issued by the said Board of Trustees, or their agent. Any person or persons, company or corporation making, using or attempting to make, print, sell, use or offer for sale, any counterfeit or any imitation whatever of the inspection tax tags or stamps issued by the said Board of Trustees or their agent, for the purpose of evading or assisting in evading the payment of the inspection, tax on fertilizers or commercial manures shall be fined.

Section 7. All tags or stamps used as evidence that said inspection tax has been paid, by stamping such tags or stamps with the name of the person or persons, company or corporation selling, shipping or manufacturing, also the date of shipment or delivery, shall be canceled by persons, etc., engaged in the manufacture or sale of fertilizers or commercial manures, and "no railroad or common carrier shall receive for shipment or delivery from any person or persons, company or corporation, any fertilizers or commercial manures with the tags or stamps bearing date of cancellation thirty or more days prior to delivery for shipment."

Section 8. The inspection tax of twenty-five cents per ton (2,000 pounds) for such fertilizers or commercial manures, or

fertilizing materials, sold or offered for sale in this State, shall be paid to the State Treasurer, to entitle the same to inspection and delivery by the person engaged in its manufacture and sale, and all persons, railroad companies or other common carriers are prohibited from receiving or delivering such fertilizers or manures that do not bear the prescribed inspection tags or stamps as evidence that the said inspection tax has been paid. But nothing herein contained shall interfere with fertilizers passing through the State in transit, nor shall apply to the delivery of fertilizer materials or bulk goods to fertilizer factories for manufacturing purposes. (Laws 1899, No. 65.)

Purchasers of commercial fertilizers, or manures, who are citizens of this State, may have the same analyzed by Clemson Agricultural and Mechanical College by taking a sample of said fertilizer from at least ten per cent. of it.

The said college shall have the said sample analyzed free of cost, and within three months after its reception supply the purchasers of such fertilizers or manures with a certificate, giving the per cent. of the different fertilizing ingredients of the same, signed by the chemist of said college, which certificate shall be admissible evidence in all suits relative to such fertilizers or manures, whether the same be instituted by the vendor or purchaser of the same.

"Vendors of commercial fertilizers or manures, whose goods or wares fall short to the extent of ten per cent. in any fertilizing ingredient guaranteed by the analysis appearing on the sack or vessel holding same, when delivered to the purchaser, shall forfeit one-half the sale price thereof." (Laws 1900, No. 263.)

TENNESSEE.

All commercial fertilizers sold or offered for sale shall by stamp or otherwise set forth on each package or parcel the chemical analysis, the name of manufacturer, and shall bear a certificate

of inspection on tags furnished by the commissioner of agriculture and showing authority to sell such fertilizers.

No fertilizer shall be sold in the State unless their analysis shall show a given per cent. as prescribed by the commissioner of agriculture.

Before selling any fertilizer, its manufacturer, dealer or agent shall file with the commissioner of agriculture a guaranteed analysis of each brand. An inspection fee of fifty cents per ton or fraction thereof shall be paid.

Inspectors are appointed who shall collect samples of fertilizers, sold in the State, for analysis. Tags provided for in this act must be attached to each package before bringing any fertilizer into the State. (Laws 1897, chap. 123.)

TEXAS.

Before any commercial fertilizer or commercial poison, or any chemical mixture used as a fertilizer or commercial poison, such as London purple, arsenic, paris green, or any poison used for the purpose of destroying the boll worm, or other pests, are sold or offered for sale, the manufacturer, agent or importer shall deposit with the Agricultural and Mechanical College a sample of the commodity offered for sale. Provided, the unmixed substances, cotton-seed meal, land plaster, salt, ashes, lime, green sand marl, uncrushed bones and animal excrement shall be exempt from operations of this law.

The manufacturer, vendor, agent, etc., shall pay a fee of $15 for each and every brand of fertilizer or commercial poison sold or offered for sale. An analysis shall be made of each sample, which shall be printed on a label which shall show:

1. Available nitrogen and its equivalent in ammonia.
2. Soluble phosphoric acid; total available phosphoric acid.
3. Reverted phosphoric acid.
4. Total phosphoric acid.

5. Potash soluble in water; or any other ingredient the fertilizer may contain. He shall place upon each label the money value of such fertilizer or commercial poison.

He shall furnish such labels in quantities of 500 or multiples thereof at one dollar per hundred.

Every box, parcel or package sold or offered for sale shall have attached the label herein referred to.

Provision is made for collecting samples of goods in the market for analysis and comparison.

Agriculturists and farmers may have samples analyzed free of charge. (Laws 1899, chap. 46.)

VERMONT.

Section 1 of this act requires that all commercial fertilizers or material used for manurial purposes, sold, offered or exposed for sale in this State, the retail price of which is ten dollars or more per ton, shall be accompanied by a printed statement certifying the number of net pounds of fertilizer in a package, the name, brand or trade-mark under which the fertilizer is sold, the name and address of the manufacturer or importer, the place of manufacture, and a chemical analysis stating the percentage of nitrogen or its equivalent in ammonia, of potash soluble in distilled water, and of phosphoric acid in available form soluble in distilled water, and reverted, as well as the total phosphoric acid. If fertilizers consist of other and cheaper materials, said labels shall give a correct general statement of the composition and ingredients it accompanies.

Sec. 2. The importer, manufacturer or party who causes said commercial fertilizer to be sold, or offers or exposes it for sale in this State, the retail price of which is ten dollars or more per ton, shall, before selling, etc., file with the director of the Vermont Agricultural Experiment Station a certified copy of the statement named in section one of this act, and deposit with said

director, at his request, a sealed jar, glass or bottle containing not less than one pound of the fertilizer, accompanied by an affidavit that it is a fair average sample thereof.

Sec. 3. The manufacturer, importer or agent of any commercial fertilizer, etc., as stated in the foregoing section, shall, before said fertilizer is sold, etc., obtain a license from the State treasurer, countersigned by said director, authorizing the sale of the same in the State, and shall affix to each barrel, bag or other package of fertilizer the word "Licensed," with the date of the license. The manufacturers or importers shall pay to the State one hundred dollars for such license, which shall expire on the thirty-first day of December of the year for which it is issued. One license shall cover all brands manufactured by any one manufacturer, corporation or company.

Sec. 4. Manufacturers and importers of commercial fertilizers sold, etc., as aforesaid shall file with the State Treasurer a bond with satisfactory sureties in the sum of one thousand dollars, payable to the State and conditioned for the payment of forfeitures and costs imposed for the violation of the provisions of this act; such bond shall be renewed from time to time as the State Treasurer may require.

Sec. 5. "The term 'commercial fertilizers,' as used in this act, shall be taken to mean compounds and manufactured substances containing, or represented to contain, two or more ingredients mentioned in section one of this act, but shall not apply to the separate ingredients used to manufacture the same, or to bone, land plaster, lime or any substance the product of nature which has not been compounded."

Sec. 6. The selling, offering or exposing for sale in this State of any pulverized leather, raw, steamed, roasted or in any form, as a fertilizer, or as an ingredient of any fertilizer or manure, is unlawful, without an explicit printed certificate of the fact, said certificate to be conspicuously affixed to every package of such fertilizer or manure, and to accompany or to go with every parcel or lot of the same.

Sec. 7. The penalty prescribed for selling, offering or exposing for sale, any commercial fertilizer, without the statement required by section one of this act, or with a label stating that said fertilizer contains a larger percentage of any one or more of the constituents mentioned in said section than is contained therein, or respecting the sale of which all the provisions of the foregoing section have not been fully complied with, shall be a forfeiture of fifty dollars for the first offense, and one hundred dollars for each subsequent offense. This section shall not affect parties manufacturing, importing or purchasing fertilizers for their own use and not for sale in this State.

Sec. 8. "All manufacturers and importers of commercial fertilizers, or wholesale dealers in the same, shall not, later than February first, furnish the director of the Vermont Agricultural Experiment Station with a complete list of the brands and of agents selling, offering or exposing for sale, such fertilizers, and on the first of each succeeding month till May first, each additional agent or dealer as in the meantime shall have been appointed."

Sec. 9. " The director shall cause one analysis or more of each fertilizer or material used for manurial purposes to be made annually and the result published monthly." The duties of said director are specified as to the manner of taking samples, label, etc., and the said director shall notify the State Treasurer of all violations of this act, who shall commence a suit, in the name of the State, on the bond required to be filed by such manufacturer and importer, and prosecute the same to final judgment, and he shall forthwith notify the said manufacturers and importers in writing, and give them not less than thirty days thereafter, in which to comply with the requirements of this act. " But there shall be no prosecution in relation to the quality of the fertilizer or the fertilizing material, if the same shall be found to be substantially equivalent to the statement of analysis made by the manufacturers or importers."

Sec. 10. "The term importers, for all the purposes of this act, shall be taken to mean all who procure or sell fertilizers made in other States."

VIRGINIA.

The commissioner of agriculture shall have jurisdiction and care of the fertilizer laws. (Laws 1890, p. 82.)

It shall be the duty of every manufacturer of or dealer in commercial fertilizers annually, before the same are offered for sale, to pay the commissioner of agriculture fifteen cents per ton as an inspection and license fee, and at same time make request for tags therefor; whereupon the commissioner shall issue tags to the parties so applying, and he is empowered to prescribe a form for such tags; the dealer shall attach a tag to each bag, barrel or package thereof, which, when attached, shall be *prima facie* evidence that the seller has complied with the requirements of the act. Tags shall be renewed annually. The manufacturer shall submit to the commissioner a written statement setting forth, first, the names and brands under which his said fertilizers are to be sold, the number of pounds in each package and the name and place of manufacture; second, a statement setting forth the following per centum of the named ingredients which they are willing to guarantee said fertilizers to contain: First, ammonia; second, available phosphoric acid; potash soluble in water. Such statement shall be considered a guarantee to the purchaser that every package of fertilizer contains not less than the per centum of each ingredient set forth.

Every person proposing to deal in commercial fertilizers shall, after filing the required statement, receive a certificate stating that he has complied with the above provisions. The said certificate, when furnished, shall authorize the party receiving it to manufacture for sale or to sell in the State the brands named in said certificate. No person who has failed to pay the fee or to

file the statement and to receive the certificate of authority aforesaid, shall be authorized to make or offer to sell fertilizers in this State.

All fertilizers or chemicals, or ingredients for manufacturing or composing the same, shall have printed upon each bag, barrel or package, the guaranteed analysis of such ingredients, as claimed by the manufacturer, showing only the per centum of ammonia, available phosphoric acid, and potash soluble in water. These statements shall all correspond with such as have been filed with the commissioner of agriculture; provided nothing in this act shall restrict sales of acid phosphate, Kainit, or other fertilizer material in bulk by importers or others, who mix fertilizer material for sale.

The purchaser may request a sample of the seller to send to the commissioner of agriculture, who shall analyze same and send a copy to buyer and seller.

If such sample, or any sample collected by an inspector, shall, upon analysis, fall ten per centum in value below the manufacturer's guaranteed analysis, the commissioner shall forbid the further sale of said fertilizer, and the purchaser may recover of the seller or the manufacturer the purchase money thereof.

The commissioner of agriculture shall have full control of the inspection and analysis of fertilizers; he shall obtain samples for analysis, and publish the results for the information of farmers.

The term "commercial fertilizers" shall not be held to include lime, land plaster, ashes, or common salt, or tobacco stems, ground or unground.

All fertilizers sold in violation of this act shall be seized and delivered to and be subject to the order of the court. (Laws 1900, chap. 10.)

WASHINGTON.

Every lot of commercial fertilizers valued at over ten dollars per ton shall be accompanied by a label showing the weight, name,

brand and trade-mark, the name and address of the manufacturer, and an analysis stating the percentage of nitrogen, of potash and phosphoric acid, and whenever any fertilizers are shipped or sold in bulk in this State, a statement must be sent to the State chemist, giving the name of the goods and accompanied by an affidavit from the seller, giving the percentage of the several fertilizing ingredients guaranteed. Samples shall be furnished to the chemist, and also the names of all agents in the State.

The manufacturer, importer or agent shall pay an analysis fee of six dollars for each fertilizing ingredient claimed to exist.

No person shall sell or offer for sale any pulverized leather, raw, steamed, roasted, or in any form, as fertilizer, without a printed certificate of the fact, to be affixed to every package.

The director of the State agricultural experiment station shall cause to be collected and analyzed, samples of such fertilizers found on sale in the State, and shall cause the results of all such analyses to be published and issued to the farmers of the State, together with the comparative commercial value per ton.

The chemist may take samples for analysis from any lot of fertilizers offered in the State.

For the purposes of this act, fertilizers shall be considered distinct brands when differing either in guaranteed composition, trade-mark, name or in any other characteristic method of marking. (Laws 1899, chap. 50.)

WEST VIRGINIA.

The sellers of commercial fertilizers or manures shall attach a statement of the number of net pounds of the same in the package of fertilizers sold, offered or exposed for sale, the name, brand or trade-mark under which it is sold, the name and address of the manufacturer, the place of manufacture and a chemical analysis stating the percentage of nitrogen or its equivalent in ammonia, of potash soluble in distilled water, and of phosphoric acid in available form, soluble in distilled water and reverted, as

well as the total phosphoric acid. In the case of fertilizers which consist of other cheaper materials, said labels shall give a general statement of the composition and ingredients of the elements relied upon, contained in the fertilizer which it accompanies. If such fertilizer is sold in bulk, such statement shall accompany and go with every lot and parcel sold, offered or exposed for sale.

The manufacturer, importer or party who causes any commercial fertilizer to be sold, exposed or offered for sale, shall, before doing so, file with the director of the West Virginia Agricultural Experiment Station a certified copy of the statement named in the preceding section of this act, and deposit with said director a sealed glass, jar or bottle, or sealed tin can, containing not less than one pound of the fertilizer named and described in said statement, with an affidavit that it is a fair average sample thereof.

An analysis fee of ten dollars shall be paid by the manufacturer, importer, agent or seller of any brand of commercial fertilizer or material used for manurial purposes for each of the fertilizing ingredients claimed to exist in each and every brand of fertilizer which he sells, offers or exposes for sale within this State, and this fee is to be paid when he files the statement required in a preceding section of this act.

The analysis fee required to be paid shall be paid to the treasurer of the West Virginia University for the use of the agricultural experiment station, said treasurer to give triplicate receipts for the payment thereof, one to be retained by him, one to be deposited with the director of the experiment station, and the other with the secretary of the Board of Regents of said university, and by them filed in their respective offices.

The director of the agricultural experiment station shall immediately after filing the receipt aforesaid issue a certificate to the party making such payment, stating the amount of fees paid, and the name, brand or trade-mark under which the fertilizer is sold, the name and address of the manufacturer or importer, the place of manufacture, the name and place of business of the

dealer and the chemical analysis as set forth in the statement by a preceding section of this act, and the applicant for said certificate is authorized to sell said fertilizer within the State of West Virginia for the period of one year from the first day of January to the thirty-first day of December, inclusive.

The director of the said experiment station is required to make or cause to be made a chemical analysis of every sample of commercial fertilizer so furnished him, and shall print the result of such analysis in the form of a label or tag; such label or tag shall set forth the name of the manufacturer, the place of manufacture, the brand of the fertilizer, and the essential ingredients contained in the same, in terms and manner approved by the director, with a certificate from him setting forth that said analysis is a true and complete analysis of the sample furnished him, of such brand of fertilizers, of the ingredients claimed to be contained therein, and he shall also place upon each label or tag the money value per ton of such fertilizer, computed from its composition, as he may determine.

Such labels or tags are to be furnished by the director in quantities of one hundred, or multiple thereof, to any person or company complying with this act and desiring to sell, offer or expose for sale any commercial fertilizer in this State, receiving therefor the sum of fifty cents for every one hundred so delivered, and shall pay the same to the treasurer of said university for the use of said experiment station, and take duplicate receipts therefor, one of which he shall retain and the other he shall deliver to the secretary of the board of regents, who shall file and preserve the same in his office.

The director of said experiment station is authorized in person or by deputy to take samples for analysis of any commercial fertilizer in possession of any dealer in this State, and he is to prescribe and enforce such rules and regulations as he may deem necessary to carry into effect the true intent and meaning of this act, and a purchaser of any commercial fertilizer in this State

may take a sample of the same and forward it to the said experiment station for analysis, and if the director has reason to believe that the manufacturer of, or dealer in said fertilizer has made any false or fraudulent representation regarding the same, he shall cause the said sample to be analyzed free of charge and certify the same to the person forwarding the sample.

Said director is required to publish, by bulletin, the brand, name and location of the manufacturer, and chemical analysis of every fertilizer analyzed or caused to be analyzed by him. The last publication to be made, if practicable, before the time at which said fertilizer is to be applied to the soil.

The willfully removing from, or defacing, or changing any label, or tag or brand affixed to any package of fertilizer under the provisions of this act, before such fertilizer has been used for manurial purposes, or the selling of such fertilizer without such label or tag being affixed thereto at the time of sale, is deemed a misdemeanor.

But this act shall not apply to any one who manufactures fertilizers for his own use, and not for sale. (Laws 1891, chap. 72.)

WISCONSIN.

It is required by this act that every person in this State, who shall sell or expose for sale any commercial fertilizer or any material used for fertilizing purposes, the price of which exceeds ten dollars per ton, shall affix to every package of such fertilizer or material a plainly printed statement of the number of net pounds therein, name or trade-mark under which the article is sold, name of the manufacturer or shipper, place of manufacture, place of business of the manufacturer, and of the following fertilizing constituents, namely: The percentage of nitrogen in an available form, of potash soluble in water, and of available phosphoric acid, soluble and reverted, as well as total phosphoric acid. A certified copy of such statement shall be filed with the director

of the agricultural experiment station of the University of Wisconsin in the month of December in each year, which copy shall, when required by said director, be accompanied by a sealed glass, jar or bottle containing at least one pound of such fertilizer or material, and an affidavit that such sample corresponds, within reasonable limits, to the fertilizer or material which it represents, in the percentage of the aforesaid constituents, which affidavit shall apply to the remaining portion of their calendar year. "Additional brands of such fertilizer or material may be offered for sale during the year, provided samples and affidavits are so filed at least one month before they are offered, in which case an analysis fee of double the usual amount must be paid. A deposit of the sample of fertilizer shall be required by said director, unless the person selling or offering for sale a fertilizer or material shall certify that its composition for the succeeding year is to be the same as given in the past previously certified statement, in which case the furnishing of a sample shall be at the discretion of said director."

"Said director shall analyze or cause to be analyzed all such samples and publish the results of such analysis in a bulletin or report on or before the first day of the next succeeding April."

The sum of twenty-five dollars shall be paid annually to said director by every manufacturer, importer, agent or seller of each fertilizer or material for each brand thereof sold within this State, and upon doing so and complying with the other provisions of law shall receive from him a certificate of such compliance which shall be a license for the sale of each brand thereof within the State from the calender year for which such fee is paid, and all moneys received by said director pursuant to this section shall be paid into the treasury of said station.

The selling or exposing for sale of said commercial fertilizer or material which is within the provisions of the preceding section without complying with the foregoing provisions, or which contains a substantially smaller percentage of fertilizer constituents

than are indicated by the printed statement thereon shall be punished.

"Said director shall annually analyze or cause to be analyzed at least one sample of every fertilizer or material used for fertilizing purposes sold or exposed for sale, under the two preceding sections, and enforce their provisions by prosecuting or causing the prosecution of every person who shall violate them. He may in person or by deputy, on tendering the value thereof, take a sample from any lot or package of fertilizer or any material used for fertilizing purposes which may be in the possession of any manufacturer, importer, agent or dealer in the State; said sample shall be drawn in the presence of the person from whom taken or his representative, be taken from a parcel or a number of packages which shall not be less than ten per centum of the whole lot sampled, be thoroughly mixed and divided into two samples, placed in glass vessels and carefully sealed and a label placed on each stating the name or brand of the fertilizer or material sampled, the name of the party from whose stock the sample was drawn, the time and place of such taking; said label shall be signed by the director or his deputy and such person or his representative at the drawing and sealing of said samples; one of said duplicate samples shall be retained by the director and the other by the party whose stock was sampled; the sample retained by the director shall be for comparison with the certified statement named in section 1494-c. (Secs. 1494-c, 1494-d, 1494-e, R. S. 1898.)

Concentrated Commercial Feeding Stuff.

The practice of cheapening the value of mixed feeds for the use of domestic animals by mixing with or adding to ground grains the hulls of oats or other valueless, bulky substitutes whereby millions of tons have been sold at extortionate prices, when the real food or nutritive value are considered, has led several States to pass laws requiring guaranteed analysis to accompany all lots sold.

Full texts of these laws may be found by the references given.

MAINE.

Every manufacturer, company or person who sells or offers for sale any commercial feeding stuff, used for feeding farm live stock, shall affix on the outside of each package a printed statement of the number of pounds, the name of the trade-mark, name of manufacturer or shipper, and a chemical analysis stating the percentage of crude protein, allowing one per cent. of nitrogen to equal six and one-fourth per cent. of protein and of crude fat it contains. The term concentrated commercial feeding stuff as here used, shall not include hay and straw, the whole seed, nor the unmixed meal made from entire grains of wheat, rye, barley, oats, corn, buckwheat and broom corn, nor shall it include wheat, rye and buckwheat brans or middlings, not mixed with other substance, but sold separately, as distinct articles of commerce, nor pure grains ground together.

The term concentrated commercial feeding stuff, as here used, shall include linseed meal, cotton seed meal, pea meal, cocoanut meals, gluten meals, gluten feeds, maize feeds, sugar feeds, dried brewer's grains, malt sprouts, hominy feeds, cerealine feeds, rice meals, oat feeds, corn and oat chops, ground beef or fish scraps,

mixed feeds and all other materials, except those named in the preceding paragraph.

Before any person can sell any commercial feeding stuff a certified statement shall be filed with the director of the agricultural college experiment station, with specimens of the stuff. He shall pay an inspection tax of ten cents per ton and shall affix a tag to each package sold, and the said director shall prescribe the form of tag to be used.

Penalties are prescribed for selling any commercial feeding stuffs without tag attached, or if the feed shall contain a less per cent. of valuable ingredients than indicated on the tag.

Said director shall analyze at least one sample of all brands of commercial feeding stuffs sold in the State. (Laws 1897, chap. 334.)

MARYLAND.

84. Printed statements are to be affixed to all packages of concentrated commercial feeding stuff for sale or distribution in this State as defined in the following section of this sub-title, with details of such statement, the "chemical analysis stating the percentage of crude protein, allowing one per cent. of nitrogen to equal six and one-fourth of protein, and of crude fat it contains, both constituents to be determined by the methods adopted at the time by the Association of Official Agricultural Chemists."

85. "The term concentrated commercial feeding stuff, as here used, shall not include hays and straws, the whole seeds nor the unmixed meals made directly from the entire grains of wheat, rye, barley, oats, Indian corn, buckwheat and broom corn. Neither shall it include wheat, rye and buckwheat, brans or middlings not mixed with other substances, but sold separately, as distinct articles of commerce, nor pure grain ground together. The agent of the State hereinafter authorized to make these inspections is fully empowered to take samples of these excepted articles when found, and if, on analysis, they prove to be adul-

terated, the vendor shall be in all respects subject to the penalties hereinafter set forth for the adulteration of concentrated commercial feeding stuff."

86. "The term concentrated commercial feeding stuff, as here used, shall include linseed meals, cotton-seed meals, cotton-seed hulls, pea meals, cocoanut meals, gluten feeds, maize feeds, starch feeds, dried brewers' grains, malt sprouts, hominy feed, cerealine feeds, rice meals, oat feeds, corn and oat chops, ground beef, fish or animal meals, mixed feeds, all patented or trade-marked foods, and all other materials of similar nature not included within the preceding section of this sub-title."

87. A certified copy of the statement named in section eighty-four of this sub-title shall be filed with the State Chemist before a sale is made of said feeding stuff, and if requested by said chemist a sealed package containing at least one pound of the feeding stuff to be sold or offered for sale, with an affidavit that said sample corresponds within reasonable limits to the feeding stuffs which it represents, in the percentage of protein and fat which it contains.

88. An inspection fee of twenty-five dollars for each brand or kind of concentrated feeding stuff contemplated to be sold must be paid by the manufacturer, importer, agent, or seller thereof, to the treasurer of the Maryland Agricultural College, and license received before it is sold, offered or exposed for sale. Said feeding stuff is defined in section 86, and the license is to sell such feeding stuff until the first day of July next following, but if any manufacturer, importer or dealer has paid the inspection fee, it shall not be necessary for any other person or his agent or representative to pay said fee.

90. "The State Chemist of the Maryland Agricultural College shall annually analyze or cause to be analyzed, at least one sample (to be taken in the manner hereinafter prescribed) of every concentrated feeding stuff sold or offered for sale under the provisions of this sub-title," and the result of said analysis, together

with any additional information, shall be published in the reports or bulletins from time to time. (Supplement to the General Public Law, from 1890 to 1900, Article 48.)

MICHIGAN.

No person shall manufacture for sale, offer for sale or sell any ground grain or feed adulterated with oat hulls. (Laws 1899, chap. 192.)

NEW JERSEY.

A statement is to be affixed to every lot or parcel of concentrated commercial feeding stuff; this statement shall contain the number of pounds, the name or trade-mark, the name and address of the manufacturer or importer. The statement shall also contain the percentage of crude fat and crude protein, allowing one per cent. of nitrogen to equal six and one-quarter per cent. of protein.

The term concentrated commercial feeding stuff shall include linseed meals, cotton-seed meal, pea meal, peanut meal, cocoanut meal, gluten meal, gluten feed, starch feed, sugar feed, rice meal, oat feed, corn and oat chop, ground beef or fish scraps, mixed feeds and all other materials of similar nature, and shall not include hays and straws, whole seed or the mixed meals made directly from the entire grains of wheat, rye, barley, oats, corn, buckwheat and broom corn; neither shall it include wheat, rye and buckwheat brans or middlings, not mixed with other substances, if sold separately as distinct articles of commerce.

A certified statement and a sample of concentrated commercial feeding stuff must be filed with the New Jersey Agricultural Experiment Station during the month of November of any such as is offered for sale by the manufacturer, importer, agent or seller.

Penalties are prescribed for the selling or offering for sale of any concentrated commercial feeding stuffs without the statements required by previous sections, or if said feeding stuffs contain a larger percentage of nitrogen or protein.

No kind of meal or ground grain shall be adulterated with milling or manufactured offals, or any other substance whatever, unless the true composition of the adulteration is marked or labeled on the package that is offered for sale, and no person shall sell or offer such for sale unless marked as prescribed.

The said experiment station is authorized to collect a sample of all brands of commercial feeding stuff, used for feeding domestic animals, sold in the State, and analyze the same and publish the result. (Laws 1900, chap. 29.)

RHODE ISLAND.

Every lot of concentrated commercial feeding stuff offered or sold shall bear a plainly affixed statement, showing the number of pounds, the name, brand or trade-mark under which the article is sold, the name and address of the manufacturer or importer, and a statement of the percentage of crude protein, allowing one per cent. of nitrogen to equal six and one-fourth per cent. of protein and of crude fat.

Hays, straws, whole seeds or unmixed meals made from grain shall not be considered concentrated feeding stuffs; nor shall it include brans or middlings unmixed and sold as distinct articles of commerce.

The term concentrated feeding stuffs shall include meals of linseed, cotton-seed, pease, cocoanut, gluten and feeds of gluten, maize, starch, sugar, dried brewers' grains, malt sprouts, hominy feeds, cerealine feeds, rice meals, oat feeds, corn and oat chops, ground beef and fish scraps, mixed feed, provenders, etc., etc.

The board may collect samples for analysis and publish the results. (Laws 1899, chap. 631.)

VERMONT.

Sec. 1. Every lot of concentrated commercial feeding stuffs, as defined in section 3, used for feeding live stock, sold or offered for sale, shall, in addition to the tax tag described in section 5, have affixed thereto a plainly printed statement certifying the number of net pounds, the name, the name and address of the manufacturer or importer, and a chemical analysis stating the percentage it contains, of crude protein, allowing one per cent. of nitrogen to equal six and one-fourth per cent. of protein, and crude fat, both constituents to be determined by methods adopted by the Association of Official Agricultural Chemists; provided that the statement of the percentage of crude fat may be omitted if it does not exceed three per cent.

Sec. 2. The term concentrated feeding stuff shall not include hays and straws, the whole or unmixed meals, made directly from the entire grains of wheat, rye, barley, oats, Indian corn, buckwheat and broom corn, nor wheat, rye and buckwheat brans or middlings, nor pure grains ground together, nor wheat bran or middlings mixed together or with other feeds.

Sec. 3. The term concentrated feeding stuff shall include linseed meals, cotton-seed, pea, cocoanut, and gluten meals, gluten feeds, maize, starch, and sugar feeds, dried brewers' grains, malt sprouts, hominy feeds, cerealine feeds, rice meals, oat feeds, corn and oat chops, corn and oat feeds, ground beef or fish scraps, mixed feeds, provenders, and all other materials of a similar nature not included in section 2.

Before any concentrated feeding stuff, as defined in section 3, is sold or exposed for sale, the importer, manufacturer or the party who causes it to be sold, for each and every feeding stuff bearing a distinguishing name and trade-mark, must file with the director of the Vermont Agricultural Experiment Station a certified copy of the statement named in section 1, and shall also deposit with said director a sample pound of the stuff to be sold.

Sec. 5. The manufacturer, importer or agent of each concen-

trated feeding stuff, as defined in section 3, shall, before the article is offered for sale, pay to the said director an inspection tax of ten cents per ton for each ton sold or offered for sale, and shall affix to each car-load and each bag, barrel or other package of such feed, a tag, to be furnished by said director, stating that all charges have been paid. The director is to prescribe the forms of tags, and adopt such regulations as may be necessary to enforce this law.

Sec. 7. All manufacturers and importers of concentrated feeding stuff shall furnish the director of the experiment station a list of the names and trade-marks of said feeds and all agents offering same.

Sec. 8. The said director shall cause one analysis or more to be made annually of each concentrated commercial feeding stuff sold or offered for sale, and shall publish the results of analysis in the bulletins of the stations. (Laws 1899, No. 83.)

Bees and the Bee Industry.

The discovery that "foul brood" is a distinct bacterial disease requiring careful and radical treatment to prevent its spreading, has caused several States and Canada to pass laws for its suppression.

See reports of the Bee Inspectors under the Commissioner of Agriculture for New York, elsewhere in this volume. Most States prohibit the adulteration of honey under the pure food laws.

ARIZONA.

Section 1. "Upon the presentation to the Board of Supervisors of any first-class county in this Territory, at any regular meeting thereof, of a petition signed by not less than ten persons, residents of said county, who are engaged in the production of honey in said county, asking for the appointment of a Foul Brood Inspector in that county, said Board of Supervisors shall appoint one person from among those recommended by the petitioners to act in that capacity. The person so appointed shall serve for a term of two years, unless removed by the Board of Supervisors for cause, before the expiration of that time."

Sec. 2. "The Inspector, when informed by any bee-keeper, in writing, that he suspects the existence of foul brood in any apiary in the county, shall at once examine said apiary, and if the disease is found to exist therein, shall also inspect all other apiaries within two miles thereof. When foul brood is found by the inspector, he shall destroy, by burning, or see that they are so destroyed by the owner, all colonies so diseased, including the hives and frames in which the diseased colony is located. Provided, that if the owner thinks that the colony or colonies condemned by the in-

spector are not diseased, a committee of investigation, composed of honey producers, shall be constituted as follows, viz: one to be chosen by the owner, one by the inspector and a third by these two. They shall examine the disputed cases, hear the inspector and owner, and shall then decide whether the said colony or colonies are diseased or not, and their decision shall be final."

Sec. 4. "The Inspector shall make an annual report to the Board of Supervisors on the first day of January of each year, giving in detail the number and location of apiaries inspected, and the number of diseased colonies found and destroyed." (Laws 1899, No. 26.)

CALIFORNIA.

This is "An Act to authorize the Board of Supervisors of the several counties of the State to appoint Inspectors of Apiaries, and provide for their compensation, and defining their duties and for the further protection of bee culture."

"It is made the duty of the Inspector, upon complaint being made to him to the effect that, in complainant's opinion, the disease known as 'foul brood' exists in any apiary in that county, to inspect such apiary as soon as practicable, and direct the person in charge thereof to destroy all hives ascertained to be so affected, together with the combs and bees therein, by burning or burying the same in the ground the following night."

"If the owner or person in charge of an apiary, by his own inspection or through any other source, discovers foul brood in any hive in said apiary, it shall be his duty to destroy such hive and contents in the manner provided as aforesaid."

No person shall sell, or offer for sale, or dispose of, adulterated honey. (Laws 1897, chap. 15.)

COLORADO.

Provision is made for county inspection of apiaries, treatment or destruction of appliances where "foul brood" is found to

exist, and penalties for the sale of infected bees and appurtenances. (Laws 1891, p. 44.)

Penalty for sale of adulterated honey. (Laws 1893, p. 393, sec. 66.)

It is unlawful to spray fruit trees while in bloom with any substance injurious to bees. (Laws 1897, chap. 55, sec. 8.)

KENTUCKY.

It is unlawful to sell or cause to be sold any manufactured honey, unless said honey is so represented and designated as manufactured honey.

The sale of manufactured honey containing any injurious substance is forbidden. (G. S., sec. 1281.)

MICHIGAN.

It shall be unlawful for any person to keep in his apiary any colony of bees affected with the contagious malady known as foul brood, and it shall be the duty of every bee-keeper, as soon as he becomes aware of the existence of said disease among his bees, to forthwith burn or bury all colonies thus affected. (C. L. 5663.)

The judge of the Probate Court may appoint a commissioner, who shall, on complaint of the bee-keepers, examine apiaries designated, and if found diseased with foul brood, he shall order the owners to destroy all diseased hives or colonies, together with all contents. (C. L. 5669.)

It is unlawful to sell or offer for sale any compounded or manufactured honey, unless such package shall be marked or labeled as such, and bearing the name of the manufacturer. (C. L. 4992.)

MINNESOTA.

It shall be unlawful to sell or offer for sale honey compounded or manufactured from or mixed with glucose, sugar syrup, or any substance whatever, not the legitimate and exclusive product of the honey bee, unless the package containing same is so marked with name of manufacturer and name of substance from which it is compounded or mixed.

Honey from bees fed on glucose or sugar syrup must be marked.

The dairy and food commissioners have authority to investigate and enforce this act. (Laws 1893, chap. 23.)

NEBRASKA.

It is unlawful to keep any honey bees, brood-comb or honey known to be infected with "foul brood," or any other infectious or contagious diseases peculiar to bees or honey, or that has been known to have been infected. (Laws 1885, chap. 3.)

Any honey bees, brood-comb, or honey known to be infected with foul brood, or other infectious or contagious disease, shall be destroyed by burning by the owner or the person in control.

The Governor may appoint a county bee inspector on the application of the State Bee-keepers' Association, whose duty shall be to inspect all apiaries in his county when called upon to do so.

All owners or keepers of honey bees shall cause them to be inspected at his own expense, and if any disease is found to exist, and that, in the opinion of the inspector, the disease can be eradicated, the bees may be kept six months for treatment, and if, at the end of the time specified, the said bees are not cured, they shall be destroyed, together with all appurtenances.

Any owner of brood-comb, bee-hives, honey or apparatus used in connection with bee culture, found infected with disease, shall have thirty days to disinfect the same, or said brood-comb, bee-

hives or apparatus shall be destroyed as provided. Inspectors' certificates are issued to the owners of apiaries, and a duplicate is filed in the office of the clerk of the court where said bees or honey are kept. (Compiled Statutes, 1897, p. 117.)

It is unlawful to steal honey or maliciously disturb or destroy any hive or box containing honey, or decoy and appropriate any bees or damage or destroy any bees by poison. (C. S. 1897, sec. 6734.)

NEW JERSEY.

The preamble which precedes this act recites the fact that the production of honey is an honest and honorable industry in this State, and that adulterations with inferior sweets not gathered by bees are manufactured and sold under the name of honey to the great injury of the industry, and to the deception of the consumer, if not to the injury of his health.

"Every person or persons, who shall manufacture, sell or cause to be sold any article or substance having the semblance of honey, and yet not the real product of the hive," shall affix a distinct printed or written label to any package of the said article, stating the constituents of the mixture or adulterant, and every sale of such article or substance not branded, marked or labeled is declared unlawful, and no action shall be maintained to recover upon any contract for the sale of any such article or substance not so branded, marked and labeled. (P. L. 1879, p. 244; P. L. 1881, p. 162.)

NEW YORK.

See laws in full elsewhere in this volume.

UTAH.

The board of county commissioners may appoint inspectors of bees, who shall be paid out of the county funds, but the assessor

of each county shall assess each colony of bees in the same manner as other assessments are made.

All hives of bees shall be inspected at least once each year. The inspector shall have authority to take charge and control of diseased bees and appurtenances for treatment, or to destroy such bees, broods or hives, and their contents, as may be infected. (Laws 1892, p. 52.)

VERMONT.

"If a person sprays or causes to be sprayed, or puts or causes to be put, any paris green, London purple, or other poisonous substance upon fruit trees while in blossom, he shall be fined," etc., etc. (Laws 1896, No. 169.)

The above law was repealed by section 1, and section 2 is as follows:

"No spraying solution containing less than three pounds of unslaked lime to fifty gallons of the solution, shall be used on fruit trees when in blossom." (Laws 1898, No. 155.)

The adulteration of honey is forbidden. (Laws 1890, No. 52.)

WASHINGTON.

It shall be unlawful for any person to willfully or maliciously place any poisonous or sweetened substance for the purpose of injuring honey bees, in any place where such poisoned or sweetened substance is accessible to honey bees. (Laws 1897, chap. 12.)

WISCONSIN.

"Section 1. Upon the recommendation of a majority vote of the members of the bee-keepers' societies of Wisconsin, the Governor shall appoint, for a term of two years, a State inspector of apiaries, who shall, if required, produce a certificate from the Governor that he has been so appointed."

"Section 2. The inspector shall, when notified, examine all reported apiaries, and all others in the same locality not reported, and ascertain whether or not the disease known as foul brood exists in such apiaries, and if satisfied of the existence of foul brood, he shall give the owners or caretakers of the diseased apiaries full instruction how to treat said cases, as in the inspector's judgment seems best."

"Section 3. The inspector, who shall be the sole judge, shall visit all diseased apiaries a second time, and, if need be, burn all colonies of bees and combs that he may find not cured of foul brood."

"Section 4. If the owner of a diseased apiary, honey, or appliances, shall sell, barter, or give away, any bees, honey, or appliances, or expose other bees to the danger, of said disease, or refuse to allow said inspector to inspect such apiary, honey, or appliances, said owner shall, on conviction before a justice of the peace, be liable to a fine."

"Section 5. The inspector of apiaries shall make an annual report to the Governor of Wisconsin, giving the number of apiaries visited, the number of diseased apiaries found, the number of colonies treated, also the number of colonies destroyed by fire, and his expenses." (Laws 1897, chap. 150.)

The selling or offering for sale of any imitation of honey which is adulterated with glucose or any other substance, without marking the package or parcel containing the same with the words "adulterated honey," and placing said words on the upper portion of the said package or parcel, is punishable by fine or imprisonment. (Laws 1881, part of chap. 40.)

CANADA.

Bees in a state of freedom shall be the property of the person discovering them, whether he is or is not the proprietor of the land on which they have established themselves.

Bees kept in hives shall be private property.

When a swarm of bees leaves a hive, the owner may reclaim them, so long as he can prove his right of property therein, and may take possession of them at any place on which the swarm settles, even if such place be on the land of another person, but the owner shall notify the proprietor of such land beforehand and compensate him for damages. If a swarm settles in a hive which is already occupied, the owner of such swarm shall lose all right of property therein.

Any unpossessed swarm which lodges on any property, without settling thereon, may be recovered by the first owner unless the proprietor of the land objects.

If the owner of a swarm declines to follow it and another person undertakes the pursuit, such other person shall have the rights of the owner, and every swarm which is not followed shall become the property of the proprietor of the land on which it settles. (R. S. O. 1897, chap. 117.)

The Ontario Bee-keepers' Association shall appoint an inspector of apiaries and a sub-inspector. The president of the association may direct the inspector to examine apiaries and ascertain whether or not "foul brood" exists, and whenever the inspector is satisfied of the existence of foul brood, in its virulent or malignant type, it shall be his duty to order all colonies so affected, together with the hives occupied by them, and the contents and all tainted appurtenances that cannot be disinfected to be immediately destroyed by fire; but where the inspector is satisfied that the disease exists in mild types, and in incipient stages, and is being or may be treated successfully or cured, the inspector may not destroy the colonies.

The inspector may order any owner of bees dwelling in box-hives, in apiaries where disease exists, to transfer such bees to movable frame hives, and in default of such transfer, he may destroy such box-hives and the bees dwelling therein.

It shall be unlawful for owners of diseased colonies of bees to sell or barter such diseased colonies or infected appliances.

No person having had any bees destroyed or treated for foul brood, shall sell or offer to sell any bees, hives or appurtenances of any kind, without the authority of the inspector to so do. Nor shall he expose any infected honey or comb or conceal the fact that his premises have been found diseased. (R. S. O. 1897, chap. 283.)

No person, in spraying fruit trees during the period when such trees are in full bloom, shall use or cause to be used any mixture containing paris green, or any other poisonous substance injurious to bees. (R. S. O. 1887, chap. 282.)

Sugar Beets.

The total amount of cane and beet sugar produced in the world is estimated at 8,447,444 tons, of which 5,907,944 tons are produced from beets. The United States produced in 1900 577,000 tons of cane sugar, and 72,944 tons of beet sugar.

In 1896 the United States produced 29,220 tons of beet sugar.

The fact that the United States imports (1899) 1,517,000 tons of sugar more than it exports has caused a few States to pass laws granting a bounty to encourage the industry in this country.

ARIZONA.

Section 1. "That any association or corporation, organized under the laws of the Territory of Arizona, who shall build and operate a plant for the manufacture of sugar from beets, within the Territory, after the passage of this act, shall, together with all the appurtenances thereunto belonging, be exempt from taxation of every kind for a period of ten years, after the completion of said plant, as hereinafter provided, and subject to the conditions and restrictions hereinafter contained."

Sec. 2. "Any association or corporation, desiring to avail themselves of the provisions of this act, shall, within one year after the passage of this act, file with the Chairman of the Board of Supervisors of each county in which such plant or part thereof is to be located, a notice in writing that they accept the conditions of this Act, and such notice shall also state as nearly as may be the precise location of such plant, and the time within which said plant will be completed; provided such association or corporation shall not be allowed more than ten acres of land to be exempt from taxation."

Sec. 3. "All plants built under the provisions of this act and claiming exemptions herein provided for, shall be completed and

in operation at the point as located within five years from the date of filing the notice provided for in this act." (Laws 1891, No. 73.)

KANSAS.

"Section 6830. That there shall be paid out of the State treasury to any corporation, firm or person engaged in the manufacture of sugar in this State from beets, sorghum, or other sugar-yielding canes or plants grown in the State of Kansas, a bounty of three-fourths of one cent per pound upon each and every pound of sugar so manufactured under the conditions and restrictions of this act." (Laws 1891, chap. 60.)

MAINE.

The governor and council may pay one cent a pound as a bounty on all sugar made from beets raised within the State. (Laws 1877, chap. 184.)

Limit, 10 years.

MICHIGAN.

Each manufactory having a capacity of two thousand pounds or upwards of sugar per day shall receive from the State one cent per pound if the beets are raised within the State, and the sugar shall contain at least ninety per cent. crystallized sugar and be manufactured under the conditions of this act. (C. L. 1245-1252.)

MINNESOTA.

The sum of $5,000 was appropriated to buy sugar beet seed, from Germany, to be distributed by the State treasurer to farmers on application, on payment of actual cost. (Laws 1897, chap. 146.)

All railroads within the State shall fix a rate for transportation of sugar beets to any beet sugar manufactory, which rate shall be the same from all points located within one hundred and twenty-five miles of said factory. (Laws 1897, chap. 265.)

The act of 1895 providing for encouraging the manufacture of sugar and paying bounty was repealed and the following substituted:

There shall be paid a bounty of one cent per pound for sugar produced in the State from beets, sorghum or other canes or plants grown in Minnesota, not exceeding $40,000. No bounty shall be paid for sugar which shall contain less than 90 per cent. crystallized sugar, or for sugar produced from beets where less than $4.25 per ton has been paid.

Provision is made for appointment of State inspectors, and their duties are defined and their expense limited to one-eighth of one cent per pound on all beet sugar examined, weighed and branded, to be paid first out of the sum appropriated. (Laws 1899, chap. 307.)

MONTANA.

One cent a pound shall be paid for every pound of sugar manufactured from sugar beets grown in the State. (R. S. 3283.)

Five thousand dollars appropriated. (R. S. 3284.)

NEW YORK.

See law elsewhere in this report.

NORTH DAKOTA.

This is an act to encourage the culture of sugar beet and the manufacture of sugar from the same. The Commissioner of Agriculture and Labor is to receive reports of the results, and

the process by which such results are obtained in the culture of sugar beets, and the manufacture of sugar from the same, and report in full to the Governor for incorporation in his annual report. A bounty of two cents per pound shall be paid from the Treasury of the State to any individual company or corporation within the State of North Dakota for each and every pound of merchantable sugar manufactured by said individual, etc., from sugar beets grown in said State, upon the report and determination of said Commissioner of Agriculture and Labor, and said bounty shall be paid upon each year's results for the term of five years from the first day of January, 1890, to all individual companies and corporations entitled to the same. *Provided*, "That the person receiving such bounty shall make a report to the Commissioner of Agriculture and Labor duly certified of all the parts of the process employed in the manufacture of such sugar, together with a definite statement of the yield." (Laws 1890, chap. 35.)

WASHINGTON.

There shall be paid one cent per pound to any person, firm or corporation engaging in the manufacture of sugar from beets grown in the State under the following conditions:

No bounty shall be paid upon sugar not containing at least ninety per cent. of crystallized sugar, and only upon sugar produced from beets for which not less than four dollars per ton has been paid to the producer.

Verified statements shall be made to the president of the State Agricultural College.

The president of the agricultural college shall determine the quantity and quality of sugar on which said bounty shall be paid. The sum of fifty thousand dollars is the limit to be paid in any one year.

The benefits of this act shall accrue to the person, firm or corporation that shall erect a complete sugar manufactory prior to

November 1, 1901, and the bounty shall be paid for a period of three years from the time such factory shall have been completed and in operation. (Laws 1899, chap. 17.)

WISCONSIN.

This is an act to ascertain at as early a day as possible those districts in the State peculiarly suited in soil and climate to the production of beet roots of a high quality, and for this purpose the agricultural experiment station of the State University is directed to continue and extend its investigation of the same, and shall procure seed of desirable varieties in quantity sufficient to allow one hundred quarter-pound packages for each member of the Senate and Assembly. Each member of the Legislature may furnish to the said station a list of one hundred farmers and gardeners desirous of testing beets, care being taken that each portion of his district is properly represented in such distribution. The experiment station shall, upon receiving lists from members before May 1, 1897, forward packages of beet seed to persons named in the lists, with directions for planting and cultivating the beet crop, and for selecting and returning samples to said station in the fall, for analysis. When the analysis is completed, the results shall be tabulated and the information gathered presented in a bulletin, copies of which shall be furnished to all persons in the State, upon request.

The sum of five hundred dollars or so much thereof as may be necessary is appropriated to the board of regents of the State University, out of funds in the treasury not otherwise appropriated, for purchasing and mailing the beet seed herein named, and carrying out the purposes of this act. Provided, No portion of this sum shall go to any regular employe of the said station for any service rendered in carrying out the purposes of this act. (Laws 1897, chap. 230.)

"Section 1. All factories or plants for the manufacture and refining of beet sugar, and all property, real or personal, used in

connection therewith, and necessary to the prosecution of the business thereof, shall be exempt from all taxes, except special assessments in cities and villages, for the term of five years from the passage and publication of this act." (Laws 1897, chap. 158.)

Section 1665, R. S., 1898, gives the standard weight of a bushel of beets at fifty pounds in Wisconsin.

WYOMING.

This is an act to promote the beet sugar industry in Wyoming, and reads as follows:

Section 1. "The property engaged and used in the manufacture of beet sugar, or any of the products of sugar beets, in the State of Wyoming, shall be exempt from taxation annually during the actual use of such property for such purpose, for a period of ten years. No factory thus engaged shall be entitled to such exemption unless at least seventy-five per centum of the sugar beets consumed therein during each year shall have been grown in Wyoming. Provided, sufficient supply can be obtained in this State." (Laws 1897, chap. 50.)

Linseed or Flaxseed Oil.

IOWA.

The manufacture or mixing for sale, as raw linseed oil, any article which is not wholly the product of commercially pure linseed or flaxseed, and the mixing for sale, selling, or offering for sale, as boiled linseed oil, any article, unless the oil from which said article is made be wholly the product of commercially pure linseed or flaxseed, and unless the same has been heated to at least two hundred and twenty-five degrees Fahrenheit, is prohibited.

The prohibition as aforesaid is not to be construed to prohibit the sale or manufacture of any compound of linseed or flaxseed oil, provided, that such compound, if it imitates in appearance and is designed to take the place of linseed or flaxseed oil, shall not be manufactured or mixed for sale, sold or offered for sale, under a name or description containing the words "linseed oil" or "flaxseed oil."

The inspectors of petroleum products, under prescribed regulations of the State board of health, are charged with the enforcement of these provisions of this act.

Power and authority are given all who are charged with the enforcement of this act of ingress and egress to and from all places where linseed or flaxseed oil is kept for sale, stored, manufactured, and can open any tank, barrel, can or other vessel containing such oil, and may inspect the contents thereof, and take samples therefrom for analysis. (Laws 1898, chap. 52.)

MICHIGAN.

It is unlawful to sell or offer for sale any linseed oil, as such, either raw, boiled or bleached, containing any adulteration or foreign matter of any kind. Every barrel or package shall be marked in conspicuous letters "pure linseed oil," and no barrel or package shall be so marked unless it contains pure linseed oil, free from all adulteration or foreign matter of any kind.

Any oil sold in this State as a substitute for linseed oil must be so branded, giving the true name and amounts of each article contained in its composition or mixture. (Laws 1899, chap. 208.)

MINNESOTA.

No person shall manufacture or offer for sale any flaxseed oil unless the same answers a chemical test for purity recognized in the United States Pharmacopeia, or any oil as "boiled linseed oil," unless it shall have been put to a temperature of two hundred and twenty-five degrees Fahrenheit.

And all oil offered for sale shall be branded "Pure Linseed Oil Raw" or "Pure Linseed Oil Boiled," as the case may be.

It is the duty of the State dairy and food commissioner to collect samples and enforce this act and prosecute for penalties. (Laws 1897, chap. 217.)

NEW JERSEY.

The manufacture, sale, or offering for sale, under the name of raw linseed oil, any article not wholly the product of pure linseed, is prohibited, as is also the manufacture, sale, or offering for sale, under the name of boiled linseed oil, any article not wholly the product of pure linseed, and unless the same has been heated to two hundred and twenty-five degrees Fahrenheit.

The manufacture or sale of any compound of linseed oil is permitted, provided such compound, designed to take place of

pure linseed oil, shall not be sold under the name of "linseed oil" or "flaxseed oil."

The State dairy commissioner is empowered to enforce this act, and the violation of its provisions is declared a public nuisance.

Inspection may be made and samples taken for analysis under certain regulations. (Laws 1898, chap. 185.)

NEW YORK.

See law in full in this volume.

NORTH DAKOTA.

It is unlawful to manufacture for sale or offer or expose for sale in this State any flaxseed or linseed oil unless the same answers a chemical test for purity recognized in the United States Pharmacopeia, or any flaxseed or linseed oil as "boiled linseed oil" unless the same shall have been put in its manufacture to a temperature of two hundred and twenty-five degrees Fahrenheit.

It is unlawful to sell, expose or offer for sale any flaxseed or linseed oil unless it is done under its true name, and each tank car, tank barrel, etc., has distinctly painted, stamped, etc., thereon the true name of such oil, the words "pure linseed oil raw" or "pure linseed oil boiled," and the name and address of the manufacturer, and sold only under the brand of such manufacturer.

It is made the duty of the State Commissioner of Agriculture and Labor, and the State's Attorneys of the different counties of this State to enforce the provisions of this act. (Laws 1899, chap. 106.)

OHIO.

No person shall manufacture, sell or offer for sale any linseed oil for other than food purposes unless the same answers a chemi-

cal test for purity recognized in the United States Pharmacopeia, or any flaxseed oil as "boiled linseed oil" unless the same shall have been heated to a temperature of two hundred and twenty-five degrees Fahrenheit.

The sale must be under its true name, and each tank car, tank barrel, keg or other vessel shall be durably marked with the true name of such oil, "pure linseed oil, raw," "pure linseed oil, boiled," as the case may be, together with the name of manufacturer and place of manufacture. (O. S., 4200, 4246 and 4249.)

WISCONSIN.

The manufacturing for sale, offering or exposing for sale, in this State, of any flaxseed or linseed oil for other than food purposes, is unlawful, unless it answers a chemical test for purity recognized in the United States Pharmacopeia, or any flaxseed or linseed oil as "boiled linseed oil" unless the same shall have been put, in its manufacture, to a temperature of two hundred and twenty-five degrees Fahrenheit.

It is unlawful for any person, firm or corporation, personally or by agent, at any time, to sell, expose or offer for sale, dispose or attempt to dispose of, any flaxseed or linseed oil unless so done under the true name of such oil, and unless each tank car, tank barrel, keg, can or other vessel containing such oil has, at such time, distinctly and durably painted, stamped, stenciled or marked thereon, the true name thereof in the words "pure linseed oil raw" or "pure linseed oil boiled," as the fact may be, and also the name and address of the manufacturer or dispenser thereof.

The adulteration by any person, firm, or corporation, personally or by agent, at any time, of any "pure linseed oil raw" or "pure linseed oil boiled," by adding thereto any other oil or substance or thing whatever, for the purpose or with the intent to sell, expose or offer for sale, such mixture or compound as the pure article, is prohibited, nor shall any person, etc., paint, stamp,

etc., any tank car, tank barrel, etc., so as to falsely represent that it contains either "pure linseed oil raw" or "pure linseed oil boiled," nor so as to falsely represent the manufacturer thereof, nor permit or suffer any such false printing, stamping, stencilling or marking.

It is made the duty of the dairy and food commissioner to see that the provisions of this act are enforced. (Laws 1899, chap. 234.)

Adulterated Maple Sugar and Syrup.

MAINE.

No person shall sell or offer for sale, as maple sugar, any article made in adulteration or imitation of maple sugar or syrup. (Laws 1895, chap. 118.)

MICHIGAN.

It shall be unlawful to manufacture, sell or offer to sell any maple sugar, maple syrup or maple molasses that is in any way adulterated with any common sugar, beet sugar, glucose or any other foreign substance, without distinctly marking each package with the name and percentage of adulteration. (C. L. 5007.)

NEW YORK.

See other pages in this volume.

OHIO.

Maple sugar, pure maple sugar and maple syrup, or pure maple syrup, shall be the unadulterated product of the evaporation of pure sap from the maple tree.

The standard weight of a gallon of maple syrup of 231 cubic inches shall be eleven pounds. (Laws 1900, p. 316.)

VERMONT.

No person shall adulterate maple sugar, maple syrup or bees' honey with cane sugar, glucose, or with any substance whatever. (Laws 1890, No. 52.)

Paris Green.

The use of paris green as an insecticide has been very general throughout the country, and its poisonous effects have been minimized by great adulteration.

Louisiana passed a law in 1890 permitting packages of Paris green containing fifty per centum of arsenic to be labeled "strictly pure," and packages containing less than fifty per centum of arsenic to be labeled "impure."

See law of New York State in this volume, among agricultural laws.

AGRICULTURAL LAW

1893-1900

AGRICULTURAL LAW.

CHAPTER 338.

AN ACT in relation to agriculture, constituting articles one, two, three, four and five of chapter thirty-three of the general laws.

Approved by the Governor April 10, 1893. Passed, three-fifths being present.

The People of the State of New York, represented in Senate and Assembly, do enact as follows:

CHAPTER XXXIII OF THE GENERAL LAWS.

The Agricultural Law.

Article 1. General provisions. (§§ 1-12.)
2. Dairy products. (§§ 20-37.)
3. Adulterated vinegar. (§§ 50-53.)
4. Diseases of domestic animals. (§§ 60-71.)
*5. Miscellaneous provisions. (§§ 80-90.)
†6. Forest preserve. (§§ 100-116.)
†7. Adirondack park. (§§ 120-127.)
‡8. Paris green. (§§ 110-114.)
§9. Regulating sale and analysis of concentrated feeding stuffs. (§§ 120-127.)

ARTICLE I.

General Provisions.

Section 1. Short title.
2. Commissioner of agriculture.
3. Power of commissioner, his assistants and employes
4. Expert butter and cheesemakers.

*Chapter 500, Laws of 1897, made new article 5, and articles 5 and 6 are made articles 6 and 7.

†Repealed and new article 6 enacted by chapter 395, Laws of 1895.

‡New article 8 enacted by chapter 113, Laws of 1898.

§New article 9 enacted by chapter 510 of the Laws of 1899.

Section 5. Annual report.
6. Certificate of chemist presumptive evidence.
7. Evidence; principal's liability for acts of agent.
8. Prosecution for penalty.
9. Disposal of fines and moneys recovered.
10. When injunction may be obtained.
11. When prosecution shall not be compelled to elect.
12. Inspection, how conducted.

§ 1. Short title. This chapter shall be known as the agricultural law.

§ 2. Commissioner of Agriculture. There shall be a department of the state government known as the department of agriculture, which shall be charged with the execution of the laws relating to agriculture and agricultural products. The commissioner of agriculture shall be the chief of the department. The New York state dairy commissioner shall be the commissioner of agriculture until his successor shall be appointed and qualified. The commissioner of agriculture shall be appointed by the governor, by and with the advice and consent of the senate. His term of office shall be three years. He shall be paid an annual salary of four thousand dollars and his necessary expenses not to exceed five hundred dollars, incurred in the discharge of his official duties. He may appoint a director of farmers' institutes and such clerks and assistant commissioners and employ such clerks, chemists, agents and counsel as he may deem necessary for the proper enforcement of such laws and the proper administration of the department, who shall receive such compensation as may be fixed by him and their necessary expenses. The compensation of his clerks, assistants and other persons employed by him and such necessary expenses shall be paid on his certificate by the treasurer on the warrant of the comptroller. All other charges, accounts and expenses of the department authorized by law shall be paid by the treasurer on the warrant of the comptroller, after they have been audited and allowed by the comptroller. The trustees of public buildings shall furnish suitable rooms for the use of the department in the new capitol.

§ 3. Powers of the commissioners,* his assistant and employes. The commissioner of agriculture, his clerks, assistants, experts, chemists, agents and counsel employed by him, shall have full access to all places of business, factories, farms, buildings, carriages, cars and vessels used in the manufacture, sale or transportation within the state of any dairy products or any imitation thereof, or of any article or product with respect to which any authority is conferred by this chapter on such commissioner. They may examine and open any package, can or vessel containing or believed to contain any article or product, which may be manufactured, sold or exposed for sale in violation of the provisions of this chapter, and may inspect the contents therein, and take therefrom samples for analysis.

§ 4. Expert butter and cheesemakers. The commissioner of agriculture may appoint and employ not more than five expert butter and cheesemakers, who shall, under his direction, examine and inspect butter and cheese factories and attend at agricultural fairs, societies and meetings designated by the commissioner, to impart thereat information as to the best and most approved method of making butter and cheese and improving the quality thereof.

§ 5. Annual report. The commissioner of agriculture shall make an annual report to the legislature on or before January fifteenth, of his work and proceedings for the year ending September thirtieth, next preceding which shall include a statement in detail of the number of assistant commissioners, chemists, experts, agents, and counsel employed under the provisions of this chapter during such year, and their compensation, expenses and disbursements; and also a statement in detail of the expenditures of moneys appropriated for the state agricultural society, the county agricultural societies and the New York agricultural experiment station; and other agricultural purposes and estimates of the amounts required for all such purposes for the ensuing year. He may require the state agricultural society and the county agricultural societies to make reports to him and prescribe the form of such reports.

* So in the original.

§ 6. Certificate of chemist presumptive evidence. Every certificate, duly signed and acknowledged, of a chemist, analyst or other expert employed by the commissioner of agriculture or any analysis, examination or investigation made by such analyst, chemist or expert with respect to any matter or product which the commissioner has authority to examine or cause to be examined, shall be presumptive evidence of the facts therein stated.

§ 7. Evidence; principal's liability for act of agent. The doing of anything prohibited by this chapter shall be evidence of the violation of the provisions of this chapter relating to the thing so prohibited and the omission to do anything directed to be done shall be evidence of a violation of the provisions of the chapter relative to the thing so directed to be done. The intent of any person doing or omitting to do any such act is immaterial in any prosecution for a violation of the provisions of this chapter. Any person who suffers, permits or allows any violation of the provisions of this chapter by his agent or servant, or in any room or building occupied or controlled by him, shall be deemed a principal in such violation and liable accordingly.

§ 8. Prosecution for penalties. Whenever the commissioner of agriculture shall know or have reason to believe that any penalty has been incurred by any person for a violation of any of the provisions of this chapter, or that any sum has been forfeited by reason of any such violation, he may cause an action or proceeding to be brought in the name of the people for the recovery of the same.

§ 9. Disposal of fines and moneys recovered. One half of all money recovered, either as penalties, forfeitures or otherwise, for the violation of any of the provisions of this chapter, and from fines imposed as a punishment for any criminal offense committed in violation of the provisions of this chapter, or of the penal code relating to the punishment of criminal offenses committed in violation of the provisions of law for the prevention of frauds in the manufacture or sale of any of the articles or products to which this chapter relates, shall be paid by the court or the clerk thereof to the city or county where the recovery shall be had or fine collected for the benefit of the poor of such city or county, except in

the city and county of New York and the city of Brooklyn, where the same shall be paid to the proper authorities, and equally divided by them between the pension funds of the police and fire departments. The residue of such moneys shall be paid into the treasury of the state, and paid out by the treasurer, upon the warrant of the comptroller, for the purpose of defraying the expenses of the department of agriculture, audited by the comptroller. The same disposal shall be made of all moneys recovered upon any bond given by any officer by virtue of the provisions of this chapter.

§ 10. When injunctions may be obtained. In an action in the supreme court for the recovery of a penalty or forfeiture incurred for the violation of any of the provisions of this chapter an application may be made on the part of the people to the court or any justice thereof for an injunction to restrain the defendant, his agents and employes from the further violation of such provisions. The court or justice to whom such application may be made, shall grant such injunction on proof, by affidavit, that the defendant has been guilty of the violations alleged in the complaint, or of a violation of any such provision subsequent to the commencement of the action, and in the same manner as injunctions are usually granted under the rules and practice of the court. No security on the part of the plaintiff shall be required, and costs of the application may be granted or refused in the discretion of the court or justice. If the plaintiff shall recover judgment in the action for any penalty or forfeiture demanded in the complaint, the judgment shall contain a permanent injunction, restraining the defendant, his agents and employes, from any further violation of such provision of this chapter. Any injunction, order or judgment obtained under this section may be served on the defendant by posting the same upon the outer door of the defendant's usual place of business, or where such violation was or may be committed, or in the manner required by the code of civil procedure, and the rules and practice of the court. Personal service of the injunction shall not be necessary when such service cannot be secured with reasonable diligence, but the service herein provided shall be

deemed sufficient in any proceeding for the violation of such injunction.

§ 11. When prosecution shall not be compelled to elect. In an action for a penalty or forfeiture incurred by reason of the violation of the provisions of this chapter, when the complaint charges a violation of any two or all of such provisions, the plaintiff shall not be compelled to elect between the counts under such different provisions, but shall be entitled to recover if it is found that a violation of any one of such provisions has been committed for which a penalty or forfeiture is imposed.

(*Amended by chapter* 557 *of the Laws of* 1898.)

§ 12. Inspection, how conducted. When the commissioner of agriculture, an assistant commissioner, or any person or officer authorized by the commissioner, or by this chapter, to examine or inspect any product manufactured or offered for sale shall in discharge of his duties take samples of such product, he shall take duplicate samples thereof in the presence of at least one witness, and he shall in the presence of such witness seal both of such samples, and shall tender, and, if accepted, deliver at the time of taking one sample to the manufacturer or vendor of such product, or to the person having custody of the same, with a statement in writing of the cause of the taking of the sample.

ARTICLE II.

DAIRY PRODUCTS.

Section 20. Definitions.
21. Care and feed of cows.
22. Prohibition of the sale of adulterated milk.
23. Regulations in regard to butter and cheese factories.
24. Cans to be branded with name of county.
25. Regulations in regard to condensed milk.
26. Manufacture and sale of imitation butter prohibited.
27. Manufacture or mixing of animal fats with milk, cream or butter prohibited.
28. Prohibited articles not to be furnished for use.
29. Use of coloring matter prohibited.
30. Manufacture and sale of imitation cheese prohibited.

Section 31. When prohibitions do not apply to skim milk or skim cheese.
32. Packages to be branded with name of maker.
33. Manufacturer's brand of cheese.
34. Use of false brand prohibited.
35. County trade-marks.
36. Object and intent of this article.
37. Penalties.

§ 20. **Definitions.** The terms, butter and cheese, when used in this article, mean, the products of the dairy, usually known by those terms, which are manufactured exclusively from pure, unadulterated milk or cream or both, with or without salt or rennet, and with or without coloring matter or sage. The terms oleomargarine, butterine, imitation butter or imitation cheese, shall be construed to mean any article or substance in the semblance of butter or cheese not the usual product of the dairy, and not made exclusively of pure and unadulterated milk or cream, or any such article or substance into which any oil, lard or fat not produced from milk or cream enters as a component part, or into which melted butter or butter in any condition or state, or any oil thereof has been introduced to take the place of cream. The term, adulterated milk, when so used, means:

1. Milk containing more than eighty-eight per centum of water or fluids.

2. Milk containing less than twelve per centum of milk solids.

3. Milk containing less than three per centum of fats.

4. Milk drawn from cows within fifteen days before and five days after parturition.

5. Milk drawn from animals fed on distillery waste or any substance in a state of fermentation or putrefaction or on any unhealthy food.

6. Milk drawn from cows kept in a crowded or unhealthy condition.

7. Milk from which any part of the cream has been removed.

8. Milk which has been diluted with water or any other fluid, or to which has been added or into which has been introduced any foreign substance whatever.

All adulterated milk shall be deemed unclean, unhealthy, im-

pure and unwholesome. The terms, pure milk or unadulterated milk, when used singly or together mean sweet milk not adulterated, and the terms pure cream or unadulterated cream, when used singly or together mean cream taken from pure and unadulterated milk.

§ 21. Care and feed of cows. No person shall keep cows, for the production of milk for market or for sale or exchange, or for manufacturing the milk or cream from the same into any article of food, in a crowded or unhealthy condition, or feed any such cows on distillery waste or on any substance in the state of putrefaction or fermentation, or upon any food that is unhealthy or that produces impure, unhealthy, diseased or unwholesome milk. But this section shall not be construed to prohibit the feeding of ensilage.

(*Amended by chapter* 101 *of the Laws of* 1900.)

§ 22. Prohibition of the sale of adulterated milk. No person shall sell or exchange, or offer or expose for sale or exchange, any unclean, impure, unhealthy, adulterated or unwholesome milk or any cream from the same, or sell or exchange or offer or expose for sale or exchange any article of food made from such milk, or of or from cream from the same, or manufacture from any such milk or cream from the same, any article of food.

(*Amended by chapter* 544 *of the Laws of* 1900.)

§ 23. Regulations in regard to butter and cheese factories. No person shall sell, supply or bring to be manufactured to any butter or cheese factory any milk diluted with water, or any unclean, impure, unhealthy, adulterated or unwholesome milk, or milk from which any of the cream has been taken, except pure skim milk to skim-cheese factories. No person shall sell, supply or bring to be manufactured to any butter or cheese factory any milk from which there has been kept back any part of the milk commonly known as strippings, or any milk that is sour, except pure skim milk to skim-cheese factories. The owner or proprie

tor or the persons having charge of any butter or cheese factory, not buying all the milk used by him, shall not use for his own benefit, or allow any of his employes or any other person to use for his own benefit, any milk, cream, butter or cheese or any other product thereof, brought to such factory, without the consent of the owners of such milk or the products thereof. Every butter or cheese manufacturer not buying all the milk he uses, shall keep a correct account of all the milk daily received, of the number of packages of butter and cheese made each day, and the number of packages and aggregate weight of cheese and butter disposed of each day; which account shall be open to inspection to any person who delivers milk to such factory.

§ 24. **Cans to be branded with the name of county.** No person shall sell or offer or expose for sale or exchange any milk, except in the county where produced, unless each can, vessel or package containing such milk shall be distinctly and durably branded with letters not less than one inch in length and of a suitable width to correspond with such length, and with suitable spaces between the letters, on the outside, above the center, on every can, vessel or package containing such milk, the name of the county from which the same is produced; and the same letters shall be branded or painted in a conspicuous place on the carriage or vehicle in which the milk is drawn to be sold; and such milk shall not be sold by the producer outside of the county in which it is produced, except in or out of a can, vessel, package or carriage or vehicle so marked. The foregoing prohibitions and provisions of this section shall not apply when milk is sold or delivered in glass bottles. No milk shall be sold or delivered in glass bottles, except in the county where produced, unless such bottles shall have legibly blown, stamped, engraved, etched, impressed or moulded in the glass, or otherwise produced upon such bottles, the name of the vendor, or the same is on a label or cover affixed thereto, or there is some mark or device on or affixed to such bottles by which the vendor may be ascertained.

(*Amended by section* 1 *of chapter* 143 *of the Laws of* 1894.)

§ 25. **Regulations in regard to condensed milk.** No condensed milk shall be made or offered or exposed for sale or ex-

change unless manufactured from pure, clean, healthy, fresh, unadulterated and wholesome milk from which the cream has not been removed. No person shall manufacture, sell or offer for sale or exchange in hermetically sealed cans, any condensed milk, containing less than twenty-five per centum of butter fats and unless put up in packages upon which shall be distinctly labeled or stamped the name of the persons or corporation by whom made and the brand by which or under which it is made. When condensed milk shall be sold from cans or packages not hermetically sealed, the vendor shall brand or label such cans or packages with the name of the manufacturer of the milk contained therein.

(*Amended by section* 1 *of chapter* 426 *of the Laws of* 1894, *and section* 1 *of chapter* 768 *of the Laws of* 1897.)

§ 26. Manufacture and sale of imitation butter prohibited No person by himself, his agents or employes, shall produce or manufacture out of or from any animal fats or animal or vegetable oils not produced from unadulterated milk or cream from the same, the article known as oleomargarine or any article or product in imitation or semblance of natural butter produced from pure, unadulterated milk or cream of the same; or mix, compound with or add to milk, cream or butter any acids or other deleterious substance or any animal fats or animal or vegetable oils not produced from milk or cream, so as to produce any article or substance or any human food in imitation or in the semblance of natural butter, nor sell, keep for sale or offer for sale any article, substance, or compound made, manufactured or produced in violation of the provisions of this section, whether such article, substance or compound shall be made or produced in this state or elsewhere.

(*Amended by section* 1 *of chapter* 149 *of the Laws of* 1899, *and chapter* 534 *of the Laws of* 1900.)

§ 27. Manufacture of (*) mixing of animal fats with milk cream or butter prohibited. No person shall manufacture, mix

*So in the original.

or compound with or add to natural milk, cream or butter any animal fats or animal or vegetable oils, nor make or manufacture any oleaginous substance not produced from milk or cream, with intent to sell the same as butter or cheese made from unadulterated milk or cream or have the same in his possession with such intent; nor shall any person solicit or take orders for the same or offer the same for sale, nor shall any such article or substance or compound so made or produced, be sold as and for butter or cheese the product of the dairy. No person shall coat, powder or color with annatto or any coloring matter whatever, butterine or oleomargarine or any compound of the same or any product or manufacture made in whole or in part from animal fats or animal or vegetable oils not produced from unadulterated milk or cream by means of which such product, manufacture or compound shall resemble butter or cheese, the product of the dairy; nor shall he have the same in his possession with intent to sell the same nor shall he sell or offer to sell the same.

§ 28. **Prohibited articles not to be furnished.** No keeper or proprietor of any bakery, hotel, boarding-house, restaurant, saloon, lunch-counter or place of public entertainment, or any person having charge thereof or employed thereat, or any person furnishing board for any others than members of his own family, or for any employes where such board is furnished for a compensation or as part of the compensation of any such employe, shall keep, use or serve therein either as food for his guests, boarders, patrons, customers or employes or for cooking purposes any article or substance made in violation of the provisions of this article.

Amended by chapter 518 *of the Laws of* 1899 *by adding new section* 29*a.*)

§ 29. **Use of coloring matter prohibited.** No person manufacturing with intent to sell any substance or article in imitation or semblance of butter or cheese not made exclusively from unadulterated milk or cream or both, with salt or rennet or both and with or without coloring matter or sage, but into which any animal, intestinal or offal fats, or any oils or fats or oleaginous

substance of any kind not produced from from* pure, unadulterated milk or cream, or into which melted butter, or butter in any condition or state or any modification of the same, or lard or tallow shall be introduced, shall add thereto or combine therewith any annatto or compounds of the same, or any other substance or substances whatever, for the purpose or with the effect of imparting thereto a color resembling yellow, or any shade of yellow butter or cheese, nor introduce any such coloring matter or other substance into any of the articles of which the same is composed.

(*Section 29a added by chapter* 518, *Laws of* 1899.)

§ 30. Manufacture and sale of imitation cheese prohibited. No person shall manufacture, deal in, sell, offer or expose for sale or exchange any article or substance, in the semblance of or in imitation of cheese made exclusively of unadulterated milk or cream, or both, into which any animal, intestinal or offal fats or oils, or melted butter or butter in any condition or state or modification of the same, or oleaginous substances of any kind not produced from unadulterated milk or cream, shall be introduced.

§ 31. When prohibition does not apply to skim-milk or skim-cheese. Except in the counties of New York and Kings, the prohibitions contained in this article against the sale of adulterated milk shall not apply to skim-milk, which is clean, pure, healthy, wholesome and unadulterated, except by skimming, sold for use in the county in which it is produced or an adjoining county, if it is sold for and as skimmed milk. The prohibitions in this article against the sale of cheese made from unadulterated milk or cream, shall not apply to pure skim-cheese made from milk which is clean, pure, healthy, wholesome and unadulterated, except by skimming.

(*Amended by chapter* 153 *of the Laws of* 1898.)

§ 32. Packages to be branded with name of maker. No manufacturer of receptacles for the package of butter shall sell or dispose of any such receptacle without branding his name and the true weight of the receptacle upon the same with legible letters

*So in the original.

or figures not less than one-quarter of an inch in length. No person shall sell, or offer for sale, any package containing butter or lard packed by him unless the true weight thereof, with the initial letters of the name of the person packing such butter or lard, be marked or stamped in a legible manner on the side or head of such package.

(*Amended by chapter* 559 *of the Laws of* 1898.)

§ 33. Manufacturer's brand of cheese. Every manufacturer of full-milk cheese may put a brand upon each cheese indicating "full-milk cheese," and the date of the month and year when made, and no person shall use such a brand upon any cheese made from milk from which any of the cream has been taken. The commissioner of agriculture shall procure and issue to the cheese manufacturers of the state on proper application therefor, and under such regulations as to the custody and use thereof as he may prescribe, a uniform stencil brand, bearing a suitable device or motto, and the words, "New York state full-cream cheese." Every such brand shall be used upon the outside of the cheese and upon the package containing the same, and shall bear a different number for each separate factory. The commissioner shall keep a book, in which shall be registered the name, location and number of each manufactory using the brand, and the name or names of the persons at each manufactory authorized to use the same. No such brand shall be used upon any other than full-cream cheese or packages containing the same.

§ 34. Use of false brand prohibited. No person shall offer, sell, or expose for sale, in any package, butter or cheese which is falsely branded or labeled.

§ 35. County trade marks. At a regular or special meeting of a county dairymen's association in any county of the state there may be adopted a county trade mark, by a majority of the members present and voting, to be used as a trade mark by am* person manufacturing pure unadulterated butter or full-cream cheese in such county. The secretary of the association shall forthwith

*So in the original.

send to the commissioner of agriculture a copy of such trade mark, which copy he shall place on file in his office, noting thereupon the day and hour he received the same. But one county trade mark for butter and for cheese shall be placed on file for the same county. No association shall adopt any trade mark of any county already on file, or use that of any other county in the formation of a trade mark.

§ 36. **Object and intent of this article.** This article and each section thereof are declared to be enacted to prevent deception in the sale of dairy products, and to preserve the public health, which is endangered by the manufacture, sale and use of the articles or substances herein regulated or prohibited.

(*Amended by chapter* 554 *of the Laws of* 1897, *chapter* 558 *of the Laws of* 1898, *chapter* 435 *of the Laws of* 1899, *and chapters* 76 *and* 559 *of the Laws of* 1900.)

§ 37. **Penalties.** Every person violating any of the provisions of this article shall forfeit to the people of the state of New York the sum of one hundred dollars for every such violation. When such violation consists of the manufacture or production of any prohibited article, each day during which or any part of which such manufacture or production is carried on or continued, shall be deemed a separate violation of the provisions of this article. When the violation consists of the sale, or the offering or exposing for sale or exchange of any prohibited article or substance, the sale of each one of several packages shall constitute a separate violation, and each day on which any such article or substance is offered or exposed for sale or exchange shall constitute a separate violation of this article. When the use of any such article or substance is prohibited, each day during which or any part of which said article or substance is so used or furnished for use, shall constitute a separate violation, and the furnishing of the same for use to each person to whom the same may be furnished shall constitute a separate violation.

ARTICLE III.

ADULTERATED VINEGAR.

Section 50. Definition of adulterated vinegar.
51. Manufacture and sale of adulterated or imitation vinegar prohibited.
52. Packages containing cider vinegar to be branded.
53. Penalties.

§ 50. Definition of adulterated vinegar. All vinegar which contains any proportion of lead, copper, sulphuric acid, or other ingredients injurious to health, or any artificial coloring matter or which has not an acidity equivalent to the presence of at least four and one-half per centum, by weight, of absolute acetic acid, or cider vinegar which has less than such an amount of acidity, or less than two per centum of cider vinegar solids on full evaporation over boiling water, shall be deemed adulterated. The term, cider vinegar, when used in this article means vinegar made exclusively from pure apple juice.

§ 51. Manufacture and sale of adulterated or imitation vinegar prohibited. No person shall manufacture for sale, keep for sale or offer for sale:

1. Any adulterated vinegar.

2. Any vinegar or product in imitation or semblance of cider vinegar, which is not cider vinegar.

3. As or for cider vinegar, any vinegar or product which is not cider vinegar.

§ 52. Packages containing cider vinegar to be branded. Every manufacturer or producer of cider vinegar shall plainly brand on the head of each cask, barrel keg or other package containing such vinegar, his name and place of business and the words "cider vinegar." And no person shall mark or brand as or for cider vinegar any package containing that which is not cider vinegar.

§ 53. Penalties. Every person violating the provisions of this article shall forfeit and pay to the people of the state the sum of one hundred dollars for each violation.

ARTICLE IV.

DISEASES OF DOMESTIC ANIMALS.

Section 60. Suppression of infectious or contagious disease.
61. Commissioner to issue notice.
62. Farms to be quarantined.
63. Detention and destruction of animals.
64. Employment of veterinary surgeons.
65. Regulations and enforcement thereof.
66. Penalties.
67. Expenses.
68. Compensation to owners of animals destroyed.
69. Federal regulations.
70. Rights of federal inspectors.

(*Amended by chapter* 118 *of the Laws of* 1900.)

§ 60. **Suppression of infectious and contagious disease.** Whenever any infectious or contagious disease except tuberculosis and glanders affecting domestic animals shall be brought into or break out in this state, the commissioner of agriculture shall take measures to promptly suppress the same, and to prevent such disease from spreading.

§ 61. **Commissioner to issue notice.** He shall issue and publish a notice, stating that a specified infectious or contagious disease exists in any designated county or other geographical district of the state, and warning all persons to seclude in the premises where they may be at the time, all animals within such county or district, that are of a kind susceptible to contract such disease, and ordering all persons to take such precautions against the spreading of the disease, as the nature thereof may in his judgment render necessary or expedient, and which he may specify in such notice. Such notice shall be published in such newspapers, and be posted in such manner as the commissioner may designate, and as, in his judgment, are most likely to give notice thereof.

§ 62. **Farms to be quarantined.** The commissioner or an assistant commissioner, shall order any premises, farm or farms where such disease exists, or recently existed, to be put in quarantine, so that no domestic animal be removed from or brought to the premises or places quarantined, and shall prescribe such regu-

lations as he may judge necessary or expedient to prevent the communication of the disease by infection or contagion, in any way from the places so quarantined.

§ 63. **Detention and destruction of animals.** The commissioner or an assistant commissioner, may order all or any animals coming into the state to be detained at any place or places for the purpose of inspection and examination. He may prescribe regulations for the destruction of animals affected with infectious or contagious disease, and for the proper disposal of their hides and carcasses, and of all objects which might carry infection or contagion. Whenever, in his judgment necessary, for the more speedy and economical suppression or prevention of the spread of any such disease, he may cause to be slaughtered, and to be afterwards disposed of, in such manner as he may deem expedient, any animal or animals, which, by contact or association with diseased animals, or by other exposure to infection or contagion, may be considered or suspected to be liable to contract or communicate the disease sought to be suppressed or prevented.

§ 64. **Employment of veterinary surgeons.** The commissioner may employ such and so many medical and veterinary practitioners and such other persons as he may, from time to time, deem necessary to assist him in discharging the duties imposed upon him by this article, and may fix their compensation. All persons now employed by the governor for such purposes shall continue in the employ of the commissioner upon the same terms, until such employment shall be terminated or modified by the commissioner. No animal shall be destroyed by the commissioner or by his order, on the ground that it is a diseased animal, unless first examined by a medical or veterinary practitioner in the employ of the commissioner under this section, nor until such practitioner renders a certificate to the effect that he has made such examination, that in his judgment such animal is affected with a specified infectious or contagious disease, or that its destruction is necessary in order to suppress or aid in suppressing such disease, or to prevent such disease, or to prevent the spread thereof specifying the reasons for such necessity.

(*Amended by chapter* 118 *of the Laws of* 1900.)

§ 65. Regulations and the enforcement thereof. The commissioner may prescribe such regulations as in his judgment may be thought suited for the suppression or prevention of the spread of any such disease, and for the disinfection of all premises, buildings, railway cars, vessels and other objects from or by means of which infection or contagion may take place or be conveyed. He may alter or modify, from time to time, as he may deem expedient, the terms of all notices, orders and regulations issued or made by him, and may at any time cancel or withdraw the same. He may call upon the sheriff or deputy sheriff, to carry out and enforce the provisions of any notice, order or regulation which he may make, and all such sheriffs and deputy sheriffs shall obey and observe all orders and instructions which they may receive from him in the premises.

§ 66. Penalties. Any person violating, disobeying or disregarding the terms of any notice, order or regulation, issued or prescribed by the commissioner under this article, shall forfeit to the people of the state the sum of one hundred dollars for every such violation.

§ 67. Expenses. All expenses incurred by the commissioner in carrying out the provisions of this article and in performing the duties herein devolved upon him shall be audited by the comptroller as extraordinary expenses of the department of agriculture, and paid out of any moneys in the treasury appropriated for such purposes.

§ 68. Compensation to owners of animals destroyed. The actual value at the time they are killed of any animals slaughtered under the provisions of this article, shall be paid to the owners of such animals. For the purpose of ascertaining and determining such value, the commissioner, or any agent appointed by him under this article, shall appoint one appraiser, the owner of the animals killed shall appoint another, and the two thus appointed shall select a third, and the three shall appraise the amount to be paid to the owner of the animals. The board of claims shall have exclu-

sive jurisdiction to hear, audit and determine all claims which shall arise under the provisions of this article for compensation for animals slaughtered, and to allow thereon such sums as should be paid by the state. No compensation shall be made to any person who has willfully concealed the existence of disease among his animals or upon his premises, or who in any way by act or by willful neglect, has contributed to spread the disease sought to be suppressed or prevented.

§ 69. Federal regulations. The commissioner of agriculture may accept, in behalf of the state, the rules and regulations prepared and adopted by the commissioner of agriculture or the secretary or department of agriculture of the United States, under any act of congress for the establishment of a bureau of animal industry or to prevent the exportation of diseased cattle or to provide means for the extirpation and suppression of pleuro-pneumonia and other contagious diseases among domestic animals and shall co-operate with the authorities of the United States in the enforcement of the provisions of any such act.

§ 70. Rights of federal inspectors. The inspectors of the bureau of animal industry of the United States shall have the right of inspection, quarantine and condemnation of animals affected with any contagious, infectious or communicable disease, or suspected to be so affected or that may have been exposed to any such disease, and for such purposes they may enter upon any ground or premises; they may call the sheriffs, constables and peace officers to assist them in discharge of their duties in carrying out the provisions of any such act; and all sheriffs, constables and peace officers shall assist such inspectors when so requested, and such inspectors shall have the same powers and protection as peace officers, while engaged in the discharge of their duties. This state shall not be liable for any damages or expenses caused or made by such inspectors.

(*Sections* 71, 72 *and* 73 *added by chapter* 491 *of the Laws of* 1898.)

ARTICLE V.

(*Made Article* 6 *by chapter* 500 *of the Laws of* 1897.)

MISCELLANEOUS PROVISIONS.

Section 80. The prevention of diseases among bees.
81. Proceedings of the agent of the commissioners.
82. The prevention of disease in fruit trees.
83. Appointment and duties of the agent of the commissioner of agriculture.
84. Proceedings in case of owner's failure to destroy.
85. The New York agricultural experiment station.
86. The state weather bureau.
87. The agricultural experiment station at Cornell university.
88. Receipts and apportionment of state moneys appropriated for the promotion of agriculture.
89. When agricultural societies entitled to additional sums from the state.
90. Annual report of the commissioner of agriculture and state society.

(*Amended by section* 1 *of chapter* 223 *of the Laws of* 1899.)

§ 80. The prevention of diseases among bees. No person shall keep in his apiary any colony of bees affected with a contagious malady known as foul brood and every bee-keeper, when he becomes aware of the existence of such disease among his bees, shall destroy or cause to be destroyed forthwith all colonies thus affected. In any county any five or more actual bee-keepers of the county in which foul brood exists, may present to the commissioner of agriculture a petition setting forth that such disease exists, or that the petitioners have reason to believe that it exists in such county, and the reasons of such belief and requesting him to appoint a competent person to prevent the spread of such disease, and eradicate the same.

Upon the receipt of such petition the commissioner of agriculture shall within thirty days thereafter appoint some well-known and competent bee-keeper of the county as an agent of the commissioner who shall hold his office during the pleasure of the commissioner of agriculture, and who shall within ten days after his appointment, file in the office of the county clerk of the county an acceptance of the appointment and constitutional oath of office.

(*Amended by section 2 of chapter 223 of the Laws of 1899.*)

§ 81. Proceedings of the agent of the commissioner. Upon written verified complaint of any two bee-keepers of the county to such agent, setting forth the existence of the disease, or that they have good reason to believe that it exists within the county, and the grounds of such belief, designating the apiary or apiaries wherein they believe it to be, such agent shall, without unnecessary delay, examine the bees so designated. If satisfied that any colony or colonies of such bees are diseased with foul brood, he shall, without further disturbance to the bees, fix some designating mark upon each hive wherein the disease exists, and immediately notify the owners of the bees, or by leaving a written notice at his place of residence, if he be a resident of the county, and if not, by leaving the same with the person in charge of such bees, requiring him within five days from the date of the notice to effectually remove or destroy such hive with its entire contents by burying them, or by fire. The agent of the commissioner shall be allowed for his services, under this section, two dollars for each full day spent by him in the discharge of his official duties, which shall be a county charge.

(*Amended by chapter 482 of the Laws of 1898.*)

§ 82. The prevention of disease in fruit trees. No person shall knowingly or willfully keep any peach, almond, apricot or nectarine tree affected with a contagious disease known as yellows, or offer for sale or shipment, or sell or ship to others any of the fruit thereof. Nor shall any person knowingly or willfully keep any plum, cherry or other trees infected with the contagious disease or fungus, known as black knot. Every such tree and the fruit of a tree infected with yellows shall be a public nuisance, and no damages shall be awarded for entering upon premises and destroying such trees and fruit if infected with yellows or for cutting away the diseased part of any tree infected with black knot or altogether destroying such tree if necessary to suppress such disease, if done in accordance with the provisions of this article. Every person when he becomes aware of the existence of such

disease in any tree or fruit owned by him, shall forthwith destroy or cause such tree or fruit to be destroyed or the infected part to be cut away.

(*Amended by chapter* 134 *of the Laws of* 1895, *and chapter* 482 *of the Laws of* 1898.)

§ 83. Appointment and duties of the agent of the commissioner of agriculture. When the commissioner of agriculture knows and has reason to believe that any such contagious disease exists, or that there is good reason to believe it exists, or danger is justly apprehended of its introduction in any town or city in the state, he shall forthwith appoint a competent freeholder of such town or city as his agent, who shall hold office during his pleasure and who shall within ten days after his appointment, file an acceptance of the appointment, with the constitutional oath of office, in the office of the town clerk of the town. Such agent shall on or without complaint, whenever it comes to his notice that either of the diseases known as yellows or black knot exists or is supposed to exist within the limits of the town or city, proceed without delay to examine the trees or fruit supposed to be infected, and if the disease is found to exist, a distinguishing mark shall be placed upon the diseased trees. If the disease is the black knot, such distinguishing mark shall be placed on some affected part of the trees, or if in the judgment of such agent any such trees should be entirely destroyed, then the trunk of such tree shall be thoroughly girdled, and thereupon the owner notified personally, or by a written notice signed by such agent and left at his usual place of residence, or if a nonresident by leaving the notice with the person in charge of the trees or fruit, or in whose possession they may be. Such notice shall contain a statement of all the facts found to exist, with an order to effectually remove and destroy by fire or otherwise the trees or parts of trees so marked and designated, within ten days, Sundays excepted, from the day of the service of the notice. In case of fruit so infected, the notice shall require the person in whose possession or control it is found, to immediately destroy the same or cause it to be done.

(*Repealed by chapter* 482 *of the Laws of* 1898.)

§ 84 Proceedings in case of owner's failure to destroy. If any person shall refuse or neglect to comply with the order of such agent to remove and destroy trees or parts of trees so marked by him, such agent shall cause such trees or parts of trees to be removed and destroyed forthwith, employing all necessary assistance for that purpose; and such agent or his employes may enter upon any and all premises within the town or city for the purpose of such removal and destruction. Such agent shall be entitled to compensation for his services under this and the preceding sections at a rate of two dollars for each full day spent by him in the discharge of his duties, and the necessary disbursements paid or incurred by him, which with the expense and removal and destruction of any such trees or fruit shall be a town charge.

(*Amended by section* 1 *of chapter* 675 *of the Laws of* 1894.)

§ 85. The New York agricultural experiment station. The institution known as the New York agricultural experiment station, established in the village of Geneva for the purpose of promoting agriculture in its various branches by scientific investigation and experiment shall continue under the control and management of a board of trustees. Such board of trustees shall be known as the board of control of the state experiment station and shall consist of nine members to be appointed by the governor whose term of office shall be three years. The governor shall be a member of the board by virtue of his office. Such board of control shall annually elect a president from their own number and appoint a secretary and treasurer to hold their offices during the pleasure of the board. Such board of control shall have general management of the station and shall appoint a director to have oversight and management of the experiments and investigations which shall be necessary to accomplish the objects of said institution, and may employ competent and suitable chemists and other persons necessary for carrying on the work of the station. Such board shall have the direction of the expenditure of all moneys appropriated to the institution and annually make a full report

to the commissioner of agriculture of their proceedings, receipts and expenditures. No member shall receive any compensation for his services as such; but shall be paid his necessary traveling expenses and those expenses incurred by him by an actual attendance upon the meeting of such board. The board shall make such rules and regulations, subject to the approval of the commissioner of agriculture, as may from time to time become necessary to carry out the objects of the station.

§ 86. The state weather bureau. The state meteorological bureau and weather service, shall hereafter be known as the state weather bureau, and shall be under the control and management of the commissioner of agriculture. Such commissioner may appoint the director of such bureau but such director shall not receive any compensation for his services. The commissioner may continue the central office and station for meteorological observation and experiment upon the grounds of Cornell university, and shall if practicable establish and supervise one or more volunteer weather stations in each congressional district of the state, in co-operation with the chief of the United States weather bureau, for the purpose of increasing the usefulness of the weather service of the state and of the United States. The sum of four thousand five hundred dollars, or so much thereof as the commissioner deems necessary, shall be annually appropriated to be paid to the commissioner by the treasurer, upon the warrant of the comptroller, issued upon the vouchers of the commissioner, for necessary clerical services at such central office, for printing and distributing reports of the results and operations of such bureau, in such manner as shall be most serviceable to the people of the state, and for the purchase, preservation and repair of proper and necessary instruments for the work of such bureau and for the reasonably necessary traveling and incidental expenses of such commissioner and director in the performance of their duties, and for such other expenses as such commissioner shall deem necessary for the efficient administration of such bureau.

(*Amended by section* 1 *of chapter* 376 *and section* 1 *of chapter* 675 *of the Laws of* 1894.)

§ 87. The agricultural experiment station at Cornell university. Cornell university is designated as the college within this state, solely entitled to receive the benefits of the act of congress of the United States approved March second, eighteen hundred and eighty-seven, entitled "An act to establish agricultural experiment stations in connection with the colleges established in the several states under the provisions of an act approved July second, eighteen hundred and sixty-two, and of the acts supplementary thereto." All benefits of such act which this state is authorized thereby to apply to any college, institution or agricultural experiment station within this state, are applied to the agricultural experiment station established under the direction of Cornell university, and this state consents that all appropriation, moneys or benefits to or for the use of this state, or of any institution within this state, payable under or in pursuance of such act of congress shall be paid to the treasurer of Cornell university, the officer designated to receive the same, to be expended as provided in such act of congress. Such experiment station shall annually, on or before the first day of February, make to the commissioner of agriculture, a full and detailed report of its operations, including a statement of its receipts and expenditures.

(*Amended by section* 1 *of chapter* 241 *of the Laws of* 1894, *section* 1 *of chapter* 820 *of the Laws of* 1895, *section* 1 *of chapter* 221 *of the Laws of* 1896, *section* 1 *of chapter* 589 *of the Laws of* 1897, *chapter* 494 *of the Laws of* 1898, *and chapters* 87 *and* 339 *of the Laws of* 1900.)

§ 88. Receipts and apportionments of state moneys appropriated for the promotion of agriculture. The moneys appropriated for the promotion of agriculture in this state shall be distributed among the various county agricultural societies, the state agricultural society and the American institute in the city of New York in such proportion that out of every eight thousand

dollars so distributed, each county society, the state society and said institute shall receive the number of dollars set opposite to it in the following schedule:

Albany	$205 00
Allegany	101 99
Broome	67 00
Cattaraugus	86 00
Cayuga	151 00
Chautauqua	143 00
Chemung	49 37
Chenango	122 00
Clinton	84 00
Columbia	133 00
Cortland	75 00
Delaware	106 00
Dutchess	157 00
Erie	186 00
Essex	71 00
Franklin	50 00
Fulton and Hamilton	60 00
Genesee	92 00
Greene	91 00
Herkimer	112 00
Jefferson	183 00
Kings	143 00
Lewis	53 00
Livingston	127 60
Madison	120 00
Monroe	194 00
Montgomery	107 00
American institute	950 00
Niagara	93 00
Oneida	255 00
Onondaga	204 00
Ontario	130 00
Orange	152 00
Orleans	75 00

Oswego	$131 00
Otsego	148 00
Putnam	38 00
Queens	91 00
Rensselaer	180 00
Richmond	34 00
Rockland	36 00
St. Lawrence	170 00
Saratoga	121 00
Schenectady	51 00
Schoharie	97 00
Schuyler	42 17
Seneca	74 00
Steuben	125 76
Suffolk	97 00
Sullivan	47 00
Tioga	61 00
Tompkins	96 70
Ulster	137 00
Warren	40 00
Washington	123 00
Wayne	126 00
Westchester	146 00
Wyoming	97 41
Yates	61 00
State society	700 00

In case a fractional part of eight thousand dollars is distributed, each society and the American institute shall receive such portion thereof as the amount to be received by it according to the foregoing schedule bears to eight thousand dollars. If there is no county agricultural society in any county, or it is not in active operation as such, the money which the county society of such county would be entitled to receive under this article shall be apportioned among and paid to the several town agricultural societies in such county according to the amount of premiums

paid, provided such town societies sustain a public fair with premium lists, which premium lists and reports of such town fairs shall be forwarded and made to the secretary of the state agricultural society.

(*Amended by section* 2 *of chapter* 241 *of the Laws of* 1894, *and repealed by chapter* 654 *of the Laws of* 1894; *re-enacted, with changes, by chapter* 587 *of the Laws of* 1895.)

§ 89. **When agricultural societies entitled to additional sums from the state.** When any county agricultural society, or the American institute in the city of New York, shall raise by voluntary subscription any sum of money, its president and treasurer shall make and subscribe an affidavit in duplicate of the formation of such society, and of its having raised a certain sum, specifying the amount, one of which affidavits shall be filed with the commissioner of agriculture and the other with the comptroller, who shall draw his warrant on the treasurer for a sum equal to the amount of such voluntary subscription, not exceeding the amount to which it would be entitled according to the apportionment in the last preceding section. Whenever the New York state agricultural society, the New York and New England agricultural society, the Western New York agricultural society, or the Interstate fair society shall annually raise, by voluntary subscription, not less than eight thousand dollars, for distribution by such society at its annual meeting and fair, as premiums on such articles productions and stock of the farm, and such improvements in farming machinery as they deem best calculated to promote the agricultural and stock-raising interests of this state, having special reference to the net profits which accrue or are likely to accrue from the mode pursued of raising the crop or stock, or the fabrication of the articles offered, with the intention that the premiums shall be given for the encouragement of the most economical or profitable mode in production; and shall so distribute such amount in such premiums; and the president and treasurer of such society shall make and subscribe a statement in duplicate verified by their affidavit, of the fact that such sum has been so raised by voluntary subscription for such premiums, specifying the amount raised

and that the same has been so distributed in premiums, and shall file one of such statements and affidavits in the office of the commissioner of agriculture and the other in the office of the comptroller; and such society shall offer in writing, signed by its president and treasurer, addressed to, and filed in the office of the comptroller, to act as the agent of the state in distributing such sum or sums of money, as the state may appropriate for distribution as premiums at its annual meeting and fair for the promotion of agriculture, and the improvement of the breed of stock in this state, and shall execute to the people of this state a bond, signed in its name by its president and treasurer, with such sureties as the comptroller shall approve, conditioned for the faithful performance of its duty, as such agent for such distribution, and shall file the same in the office of the comptroller, the state will appropriate, in each case the sum of eight thousand dollars to be distributed by such society, as premiums on such articles, productions, stock and improvements as may be exhibited at its annual meeting and fair on the conditions hereinbefore named, provided, however, that before any portion of the sum so to be appropriated by the state shall be so distributed as premiums, the person, persons, company or association claiming the same, or to whom the same may be awarded, shall first deliver in writing, to the president of such society an accurate and complete description of the process, in preparing the soil, including the quantity and quality of the manure applied, in raising the crop and in feeding the animal, including the kind and quantity of food, as near as may be, and also of the expense and product of the crop, or of increase in the value of the animal, with the view of showing accurately the profit of cultivating the crop or of feeding or of fattening the animal.

§ 90. **Annual report to the commissioner of agriculture and state society.** The president and treasurer of any agricultural society which receives any money of the state or acts as the agent of the state in the distribution of money of the state as premiums, shall annually before the fifteenth of December, transmit to the commissioner of agriculture a detailed account of the expenditure or distribution of all such moneys as shall have come into their hands during the preceding year, and of such other moneys as they

may have received from voluntary contributions for distribution as premiums, stating to whom, and for what purpose paid, with the vouchers therefor. The presidents of the several county societies and of the American institute shall annually transmit in the month of December, to the executive committee of the New York state agricultural society, all such reports or returns as they are required to demand from applicants, for premiums, together with an abstract of their proceedings during the year which shall be examined by such executive committee, and that they shall condense, arrange and report the same, with a statement of their own proceedings to the legislature on or before the first day of March in each year.

(*Amended by chapter* 640 *of the Laws of* 1894, *and chapter* 194 *of the Laws of* 1898.)

§ 91. This chapter shall take effect immediately.

CHAPTER 570.

AN ACT to amend the code of criminal procedure, relating to violations of the agricultural law.

Approved by the Governor May 4, 1893. Passed, three-fifths being present.

The People of the State of New York, represented in Senate and Assembly, do enact as follows:

Section 1. Section fifty-six of the code of criminal procedure is hereby amended to read as follows:

§ 56. Jurisdiction of courts. Subject to the power of removal provided for in this chapter, courts of special sessions, except in the city and county of New York and the city of Albany, have in the first instance exclusive jurisdiction to hear and determine charges of misdemeanors committed within their respective counties, as follows:

* * * * * * * *

35. All violations of the provisions of the agricultural law.

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SECTION 408a OF THE PENAL CODE.

(*Amended by chapter* 426 *of the Laws of* 1894, *and chapter* 554 *of the Laws of* 1897.)

Section 408a of the Penal Code provides as follows:

408a. Violation of the agricultural law. Any person who disregards, disobeys or violates any proclamation, notice, order or regulation lawfully issued or prescribed by the commissioner of agriculture for the suppression or prevention of the spread of infectious or contagious diseases among domestic animals, or who violates any of the provisions of sections eighty and eighty-two of article five of the agricultural law is guilty of a misdemeanor; every person who violates any of the provisions of article two of said chapter is guilty of a misdemeanor and shall be punished by a fine of not less than twenty-five dollars nor more than two hundred dollars, or by imprisonment of not less than one month or more than six months or by both such fine and imprisonment, for the first offense.

EXTRACT FROM CHAPTER 332 OF THE LAWS OF 1893.

SCHEDULE OF LAWS REPEALED.

REVISED STATUTES.	Sections.
Part 1, chapter 17, title 3	1-4.

LAWS OF	Chapter.	Section.
1841	169	All, except §§ 3 and 6.
1844	336	All.
1848	299	All, except §§ 3 and 6.
1869	167	All.
1878	134	All.
1879	306	All.
1880	592	All.
1881	300	All.
1882	215	All.
1882	238	All.
1882	246	All.
1883	13	All.
1884	202	All.
1884	418	All.
1884	474	All.
1885	183	All, except § 26.
1885	283	All.
1885	127	All.
1885	458	All.
1886	280	All.
1886	577	All, except that part of § 6 designated as § 24.
1887	155	All.
1887	223	All.
1887	403	All.
1887	430	All.
1887	475	All.
1887	562	All.
1887	583	All.
1888	286	All.
1888	298	All.
1888	520	All.
1888	550	All.
1889	24	All.
1889	148	All.
1889	515	All.
1889	538	All.
1890	8	All.
1891	140	All.
1891	354	1, 2.
1892	501	All.
1892	707	All.

LAWS OF 1894.

CHAPTER 143.

AN ACT to amend the agricultural law relating to condensed milk.

Became a law March 19, 1894, with the approval of the Governor. Passed, three-fifths being present.

The People of the State of New York, represented in Senate and Assembly, do enact as follows:

Section 1. Section twenty-five of chapter three hundred and thirty-eight of the laws of eighteen hundred and ninety-three, entitled "An act in relation to agriculture, constituting articles one, two, three, four and five of chapter thirty-three of the general laws," as amended by chapter five hundred and sixty-four of the laws of eighteen hundred and ninety-three, is hereby amended so as to read as follows:

§ 25. Regulations in regard to condensed milk. No condensed milk shall be made or offered or exposed for sale or exchange unless manufactured from pure, clean, healthy, fresh, unadulterated and wholesome milk from which the cream has not been removed either wholly or in part, or unless the proportion of milk solids shall be in quantity the equivalent of twelve per centum of milk solids in crude milk, and of which solids twenty-five per centum shall be fats. No person shall manufacture, sell or offer for sale or exchange in hermetically sealed cans, any condensed milk unless put up in packages upon which shall be distinctly labeled or stamped the name of the person or corporation by whom made and the brand by which or under which it is made. When condensed milk shall be sold from cans or packages not hermetically sealed, the vendor shall brand or label such cans or packages with the name of the manufacturer of the milk contained therein.

§ 2. This act shall take effect immediately.

CHAPTER 153.

AN ACT to establish a state veterinary college at Cornell university.

Became a law March 21, 1894, with the approval of the Governor. Passed, three-fifths being present.

The People of the State of New York, represented in Senate and Assembly, do enact as follows:

Section 1. There is hereby established a state veterinary college at Cornell university. For the purpose of constructing and equipping suitable buildings for such college upon the grounds of said university at Ithaca, New York, the sum of fifty thousand dollars, or as much thereof as may be necessary, is hereby appropriated, to be paid by the treasurer, upon the warrant of the comptroller upon vouchers approved by the commissioner of agriculture to the Cornell university. No part of such moneys shall be expended until plans and specifications for the construction and equipment of such building, and of the location thereof, shall have been approved by the commissioner of agriculture, nor until the comptroller shall have certified that in his judgment the expense of the completion and equipment of such buildings in accordance with such plans and specifications will not exceed the amount of such appropriation. Such buildings and equipment shall be the property of the state.

§ 2. This act shall take effect immediately.

CHAPTER 241.

AN ACT to amend the agricultural law in relation to the distribution of money for agricultural purposes, and repealing certain acts and parts of acts.

Became a law April 3, 1894, with the approval of the Governor. Passed, three-fifths being present.

The People of the State of New York, represented in Senate and Assembly, do enact as follows:

Section 1. Section eighty-eight, article five of chapter three

hundred and thirty-eight of the laws of eighteen hundred and ninety-three, entitled "An act in relation to agriculture, constituting articles one, two, three, four and five of the general laws," is hereby amended to read as follows:

(*Amended by section* 1 *of chapter* 820 *of the Laws of* 1895, *section* 1 *of chapter* 221 *of the Laws of* 1896, *section* 1 *of chapter* 589 *of the Laws of* 1897, *chapter* 494 *of the Laws of* 1898, *and chapters* 87 *and* 339 *of the Laws of* 1900.)

§ 88. **Receipts and apportionment of moneys for the promotion of agriculture.** Money appropriated for the promotion of agriculture in this state, the distribution of which is not otherwise provided by law, and money collected from racing associations pursuant to chapter four hundred and seventy-nine of the laws of eighteen hundred and eighty-seven, shall be apportioned and distributed by the commissioner of agriculture among the various county agricultural societies and the American institute in the city of New York, as follows: One-half thereof shall be apportioned and distributed equally, and the remainder in proportion to the actual premiums paid during the previous year by such societies and institute, exclusive of premiums paid for trials or tests of speed, skill or endurance of man or beast. If there is no county agricultural society in any county, or it is not in active operation as such, the money which the county society of such county would be entitled to receive under this article shall be apportioned among and paid to the several town agricultural societies in such county according to the amount of premiums paid, provided such town societies sustain a public fair with premium lists, which premium lists and reports of such town fairs shall be forwarded and made to the commissioner of agriculture.

§ 2. Section eighty-nine of said act is hereby amended to read as follows:

(*Repealed by chapter* 654 *of the Laws of* 1894; *re-enacted, with changes, by chapter* 587 *of the Laws of* 1895.)

§ 89. If any agricultural society, club or exposition other than the state agricultural society, which has held annual fairs during the past three years, shall, in any year, pay out at its annual meeting or fair three thousand dollars, as premiums for the pro

motion of agricultural interests, exclusive of premiums paid for trials of speed or endurance of man or beast, and the president and treasurer of such society, club or exposition shall make and subscribe a statement in duplicate, verified by their affidavit, of the fact that such sum has been so paid and distributed in premiums, and shall on or before the first day of December in such year, file one of such statements and affidavits in the office of the commissioner of agriculture, and the other in the office of the comptroller, and such society, club or exposition shall make an offer in writing, signed by its president and treasurer, addressed to and filed in the office of the comptroller, to act as the agent of the state in distributing such sum or sums of money as the state may appropriate for distribution as premiums at its annual meeting, and fair, for the promotion of agriculture, and the improvement of the breed of stock in this state, and the encouragement of the domestic and mechanic arts, and shall execute to the people of this state a bond, signed in its name by its president and treasurer, with such sureties, as the comptroller shall approve, conditioned for the faithful performance of its duty as such agent, for such distribution, and shall file the same in the office of the comptroller, the state will appropriate to each of such societies, clubs or expositions, the sum of two thousand dollars, to be distributed by such society, club or exposition as premiums on such articles, productions, stock and improvements as may be exhibited at its annual meeting and fair on the conditions hereinbefore named. Provided, however, that if any such society, club or exposition shall receive in any year two thousand dollars as herein provided, such society, club or exposition shall not receive any portion of the moneys collected from racing associations, pursuant to chapter four hundred and seventy-nine of the laws of eighteen hundred and eighty-seven, or of moneys already appropriated for the benefit of the county agricultural societies.

§ 3. Section six of chapter four hundred and seventy-nine of the laws of eighteen hundred and eighty-seven, and chapter five hundred and eleven of the laws of eighteen hundred and ninety-two, are hereby repealed.

§ 4. This act shall take effect immediately.

CHAPTER 376.

AN ACT to amend the agricultural law in relation to experiment stations.

Became a law April 27, 1894, with the approval of the Governor. Passed, three-fifths being present.

The People of the State of New York, represented in Senate and Assembly, do enact as follows:

Section 1. Section eighty-seven of chapter three hundred and thirty-eight of the laws of eighteen hundred and ninety-three, entitled "An act in relation to agriculture, constituting articles one, two, three, four and five of chapter thirty-three of the general laws," is hereby amended so as to read as follows:

§ 87. The Cornell university and the agricultural experiment station at Geneva, established by the laws of this state, are hereby designated as the institutions within this state to receive the benefits of the act of congress of the United States, approved March second, eighteen hundred and eighty-seven, entitled "An act to establish agricultural experiment stations in connection with the colleges established in the several states under the provisions of an act approved July second, eighteen hundred and sixty-two, and the acts supplementary thereto." All benefits of said act which this state is authorized to apply to any college, institution or agricultural experiment station, within this state, are hereby applied to the agricultural experiment station established under the direction of the Cornell university and the agricultural experiment station at Geneva, and this state hereby consents that all appropriations, moneys or benefits to or for the benefit of this state, or any institution within this state payable under or in pursuance of this act of congress shall be paid nine-tenths thereof to the officer of the Cornell university, designated to receive the same in accordance with said act, and one-tenth thereof to the officer of the agricultural experiment station at Geneva, designated to receive the same in accordance with said act of congress. Such experiment stations shall, annually, on or before the first day of February make, to the commissioner of agriculture, a full and detailed report of its operations, including

a statement of its receipts and expenditures for the year ending with the thirteenth day of September then next preceding.

§ 2. This act shall take effect immediately.

CHAPTER 426.

AN ACT to amend the agricultural law and the penal code relative to violations of the same.

Became a law May 3, 1894, with the approval of the Governor. Passed, three-fifths being present.

The People of the State of New York, represented in Senate and Assembly, do enact as follows:

Section 1. Section twenty-six of the agricultural law is amended as follows:

(*Amended by section* 1 *of chapter* 768 *of the Laws of* 1897.)

§ 26. Manufacture and sale of imitation butter prohibited. No person, by himself, his agents or employes, shall produce or manufacture out of or from any animal fats or animal or vegetable oils not produced from unadulterated milk, or cream from the same, any article or product in imitation or semblance of natural butter produced from pure, unadulterated milk or cream of the same; nor shall any person solicit or take orders for the same, or offer the same for sale, or mix, compound with or add to milk, cream or butter any acids or other deleterious substance, or any animal fats or animal or vegetable oils not produced from milk or cream, so as to produce any article or substance or any human food in imitation or in semblance of natural butter, nor sell, keep for sale or offer for sale any article, substance or compound made, manufactured or produced in violation of the provisions of this section, whether such article, substance or compound shall be made or produced in this state or elsewhere.

§ 2. Section four hundred and eight-a of the penal code is amended as follows:

(*Amended by chapter* 554 *of the Laws of* 1897.)

§ 408a. Violations of agricultural law. Any person who disregards, disobeys or violates any proclamation, notice, order or regulation, lawfully issued or prescribed by the commissioner of

agriculture for the suppression or prevention of the spread of infectious or contagious diseases among domestic animals, or who violates any of the provisions of sections eighty and eighty-two of article five of the agricultural law, is guilty of a misdemeanor; every person who violates any of the provisions of article two of said chapter is guilty of a misdemeanor, and shall be punished by a fine of not less than twenty-five dollars nor more than two hundred dollars, or by imprisonment of not less than one month nor more than six months, or by both such fine and imprisonment, for the first offense, and by six months imprisonment for the second offense; and any person who violates any of the provisions of article three of said chapter is guilty of a misdemeanor, and shall be punished by a fine of not less than fifty dollars nor more than one hundred dollars.

§ 3. This act shall take effect immediately.

CHAPTER 640.

AN ACT to amend the agricultural law authorizing agricultural societies and corporations to lease their grounds.

Became a law May 10, 1894, with the approval of the Governor. Passed, three-fifths being present.

The People of the State of New York, represented in Senate and Assembly, do enact as follows:

Section 1. Section ninety-one, article five of the agricultural law is hereby amended to read as follows:

(*Amended by Chapter* 194 *of the Laws of* 1898.)

§ 91. Lease of grounds of agricultural societies and corporations. Any agricultural society or corporation, owning or possessing grounds in a county of this State having a population of more than three hundred thousand and less than six hundred thousand may lease such grounds for any lawful purpose except running races not inconsistent with the use thereof for the purposes of the society or corporation, for such time or times as said grounds may not be needed by any such agricultural society or corporation for its own purposes.

§ 2. This act shall take effect immediately.

CHAPTER 675.

AN ACT to amend the agricultural law, in relation to agricultural experiment stations within this state, and to make an appropriation therefor.

Became a law May 12, 1894, with the approval of the Governor. Passed, three-fifths being present.

The People of the State of New York, represented in Senate and Assembly, do enact as follows:

Section 1. Sections eighty-five and eighty-seven of chapter three hundred and thirty-eight of the laws of eighteen hundred and ninety-three, entitled "An act in relation to agriculture, constituting articles one, two, three, four and five of chapter thirty-three of the general laws," are hereby amended to read as follows:

§ 85 The New York Agricultural Experiment Station. The institution known as the New York Agricultural Experiment Station, established in the village of Geneva, for the purpose of promoting agriculture in its various branches by scientific investigation and experiment shall continue under the control and management of a board of trustees. Such board of trustees shall be known as the board of control of the state experiment station and shall consist of nine members to be appointed by the governor whose term of office shall be three years. The governor shall be a member of the board by virtue of his office. Such board of control shall annually elect a president from their own number and appoint a secretary and treasurer to hold their offices during the pleasure of the board. Such board of control shall have general management of the station and shall appoint a director to have oversight and management of the experiments and investigations which shall be necessary to accomplish the objects of said institution, and may employ competent and suitable chemists and other persons necessary for carrying on the work of the station. Such board shall have the direction of the expenditure of all moneys appropriated to the institution and annually, on or before the first day of December, make a full report to the commissioner of agriculture of their proceedings, receipts and expenditures, for the year ending with the thirtieth day of September then next pre-

ceding. No member shall receive any compensation for his services as such; but shall be paid his necessary traveling expenses and those expenses incurred by him by an actual attendance upon the meeting of such board. The board shall make such rules and regulations, subject to the approval of the commissioner of agriculture, as may from time to time become necessary to carry out the objects of the station. Such experiment station may, with the consent and approval of the commissioner of agriculture, appoint agricultural experts to assist such experiment station, in the second judicial department, in conducting scientific investigations and experiments in agriculture; in disseminating agricultural knowledge by means of lectures or otherwise; and in preparing and printing for free distribution the results of such investigations and experiments, and such other information as may be deemed desirable and profitable in promoting the agricultural interests of the state. Such experts may be removed by such experiment station, in its discretion, and may be paid for their services such sum as it may deem reasonable and proper and as shall be approved by the commissioner of agriculture. All of such work by such experiment station and by such experts shall be under the general supervision and direction of the commissioner of agriculture.

§ 87. The Cornell university and the agricultural experiment station at Geneva established by the laws of the state are hereby designated as the institutions within this state, entitled to receive such portion as the legislature shall determine of the benefits of the act of the congress of the United States, approved March second, eighteen hundred and eighty-seven, entitled "An act to establish agricultural experiment stations in connection with the colleges established in the several states, under the provisions of an act approved July second, eighteen hundred and sixty-two, and of the acts supplementary thereto." Such benefits of such acts which this state is authorized thereby to apply to any college, institution or agricultural experiment station within this state, are applied to the agricultural experiment station established under the direction of Cornell university and the agricultural experiment station at Geneva, and this state consents that such ap

propriation, money or benefits to or for the use of this state, or of any institution within this state, payable under or in pursuance of such act of congress, shall be paid nine-tenths thereof to the treasurer of Cornell university, the officer designated to receive the same, and one-tenth thereof to the officers of the agricultural experiment station at Geneva designated to receive the same, to be expended as provided in such act of congress. Such experiment station shall, annually, on or before the first day of December, make, to the commissioner of agriculture, a full and detailed report of its operations, including a statement of its receipts and expenditures for the year ending with the thirtieth day of September then next preceding. Such experiment station may, with the consent and approval of the commissioner of agriculture, appoint horticultural experts to assist such experiment station, in the fifth judicial department, in conducting investigations and experiments in horticulture; in discovering and remedying the disease of plants, vines and fruit trees; in ascertaining the best means of fertilizing vineyard, fruit and garden plantations, and of making orchards, vineyards and gardens prolific; in disseminating horticultural knowledge by means of lectures or otherwise; and in preparing and printing for free distribution, the results of such investigations and experiments, and such other information as may be deemed desirable and profitable in promoting the horticultural interests of the state. Such experts may be removed by such experiment station, in its discretion, and may be paid for their services such sum as it may deem reasonable and proper, and as shall be approved by the commissioner of agriculture. All of such work by such experiment station and by such experts shall be under the general supervision and direction of the commissioner of agriculture.

§ 2. The treasurer of this state shall keep the account of all moneys hereafter received by him in pursuance of such act of congress, in a separate fund, to the credit of the Cornell university and the agricultural experiment station at Geneva, in the proportion stated in section one of this act, and shall pay all such moneys immediately upon the receipt thereof by him to the officers respectively designated therein to receive the same, upon the

warrant of the comptroller, issued upon the order of the trustees of Cornell university and the board of control of the agricultural experiment station at Geneva, in pursuance of said act of congress, which said moneys are hereby appropriated for the purposes herein stated.

§ 3. The sum of eight thousand dollars, or so much thereof as may be necessary, is hereby appropriated out of any money in the treasury not otherwise appropriated, to be paid to the New York State Agricultural Experiment Station, at Geneva, for the purpose of agricultural experiments, investigations, instruction and information, in the second judicial department, pursuant to section eighty-five of the agricultural law, and the sum of eight thousand dollars, or so much thereof as may be necessary, is hereby appropriated out of any moneys in the treasury, not otherwise appropriated, to be paid to the agricultural experiment station at Cornell university, for the purpose of horticultural experiments, investigations, instruction and information, in the fifth judicial department, pursuant to section eighty-seven of the agricultural law. Such money shall be paid by the treasurer upon the warrant of the comptroller, upon vouchers approved by the commissioner of agriculture.

§ 4. This act shall take effect immediately.

LAWS REPEALED.

LAWS OF	Chapter.	Section.
1887	479	6.
1891	354	All.
1892	511	All.
1893	338	89.

LAWS OF 1895.

CHAPTER 70.

AN ACT to authorize the commissioner of agriculture to settle and compromise certain claims in favor of the state for violations of sections twenty-six, twenty-seven, twenty-eight and twenty-nine of the agricultural law, relating to the sale or use of oleomargarine, so called.

Became a law March 4, 1895, with the approval of the Governor. Passed, three-fifths being present.

The People of the State of New York, represented in Senate and Assembly, do enact as follows:

Section 1. The commissioner of agriculture, subject to the approval in writing of the governor and attorney-general, is hereby authorized and empowered to settle, compromise and discharge all actions and causes of actions, or claims arising under the agricultural law since its passage to the passage of this act for any violation of sections twenty-six, twenty-seven, twenty-eight and twenty-nine of the agricultural law relating to the sale or use of oleomargarine, so called.

§ 2. All moneys received pursuant to any such settlement shall be paid by said commissioner into the treasury of the state; and any settlement made pursuant to this act shall be reported by the said commissioner in his next annual report.

§ 3. This act shall take effect immediately.

CHAPTER 134.

AN ACT to amend the agricultural law, in relation to agents appointed by the commissioner of agriculture to investigate the diseases of yellows or black knot.

Became a law March 20, 1895, with the approval of the Governor. Passed, three-fifths being present.

The People of the State of New York, represented in Senate and Assembly, do enact as follows:

Section 1. Section eighty-three of the agricultural law is amended to read as follows:

(*Amended by chapter* 482 *of the Laws of* 1898.)

§ 83. Appointment and duties of the agents of the commissioner of agriculture. When the commissioner of agriculture has good reason to believe that any such contagious disease exists, or that there is danger of its introduction, in any town or city in the state, he shall, on the request of the town board of such town or the common council of such city, forthwith appoint a competent freeholder of such town or city as his agent, such freeholder to be recommended by the aforesaid town board or common council who shall within ten days after his appointment, file in the office of the clerk of such town or city his acceptance of the appointment and the constitutional oath of office. Such agent shall not hold office or be entitled to receive compensation for more than thirty days in the same calendar year, unless the supervisor of such town or the mayor of such city shall request an extension of term. If so requested the commissioner of agriculture may extend the term of such agent for the number of additional days, not exceeding thirty, specified in such request, and such agent shall be entitled to compensation accordingly. Such agent shall on or without complaint, whenever it comes to his notice that either of the diseases known as yellows or black knot exists or is supposed to exist within the limits of the town or city, proceed without delay to examine the trees or fruit supposed to be infected, and if the disease is found to exist, a distinguishing mark shall be placed upon the diseased trees. If the disease is the black knot, such distinguishing mark shall be placed on some affected part of the

trees, or if in the judgment of such agent any such trees should be entirely destroyed then the trunk of such tree shall be thoroughly girdled, and thereupon the owner notified personally, or by a written notice signed by such agent and left at his usual place of residence, or if a non-resident, by leaving the notice with the person in charge of the trees or fruit, or in whose possession they may be. Such notice shall contain a statement of all the facts found to exist, with an order to effectually remove and destroy by fire or otherwise the trees or parts of trees so marked and designated, within ten days, Sundays excepted, from the day of the service of the notice. In case of fruit so infected, the notice shall require the person in whose possession or control it is found, to immediately destroy the same or cause it to be done.

§ 2. Every such agent of the commissioner of agriculture in office when this act takes effect shall, if his duties require, continue in office for ten days thereafter when his term shall expire. The commissioner of agriculture shall forthwith notify every such agent, in office when this act takes effect, that his term expires on the tenth day thereafter, but the failure to receive such notice shall not entitle any such agent to receive compensation after the expiration of his term.

§ 3. This act shall take effect immediately.

CHAPTER 395.

AN ACT to amend the game law and to repeal chapter three hundred and thirty-two of the laws of eighteen hundred and ninety-three, entitled "An act in relation to the forest preserve and Adirondack park, constituting articles six and seven of chapter forty-three of the general laws."

Became a law April 25, 1895, with the approval of the Governor. Passed, three-fifths being present.

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§ 6. The schedule of articles at the beginning of the agricultural law, chapter three hundred and thirty-eight of the laws of eighteen hundred and ninety-three, is hereby amended to read as follows:

CHAPTER XXXIII OF THE GENERAL LAWS.

THE AGRICULTURAL LAW.

Article 1. General provisions. (§§ 1-12.)
2. Dairy products. (§§ 20-37.)
3. Adulterated vinegar. (§§ 50-53.)
4. Diseases of domestic animals. (§§ 60-71.)
5. Miscellaneous provisions. (§§ 80-90.)
6. Laws repealed. (§§ 100-101.)

§ 7. The agricultural law is further amended by adding at the end thereof the following new article:

ARTICLE VI.

(*Made article 7 by chapter* 500 *of the Laws of* 1898.)

LAWS REPEALED.

Section 100. Laws repealed.
101. When to take effect.
Schedule of laws repealed.

§ 100. **Laws repealed.** Of the laws enumerated in the schedule hereto annexed, that portion specified in the last column is repealed.

§ 101. **When to take effect.** This chapter shall take effect immediately.

SCHEDULE OF LAWS REPEALED.

REVISED STATUTES.	Sections.
Part 1, chapter 17, title 3	1-4.

LAWS OF	Chapter.	Sections.
1841	169	All, except §§ 3 and 6.
1844	336	All.
1848	299	All, except §§ 3 and 6.
1869	167	All.
1878	134	All.
1879	306	All.
1880	592	All.
1881	300	All.
1882	215	All.
1882	238	All.
1882	246	All.
1883	13	All.
1884	202	All.
1884	418	All.
1884	474	All.
1885	183	All, except § 26.
1885	283	All.
1885	127	All.
1885	458	All.
1886	280	All.
1886	577	All, except that part of § 6 designated as § 24.
1887	155	All.
1887	223	All.
1887	403	All.
1887	430	All.
1887	475	All.
1887	562	All.
1887	583	All.
1888	286	All.
1888	298	All.
1888	520	All.
1888	550	All.
1889	24	All.
1889	148	All.
1889	515	All.
1889	538	All.
1890	8	All.
1891	140	All.
1891	354	1, 2.
1892	501	All.
1892	707	All.

CHAPTER 587.

AN ACT to amend the agricultural law, relating to the distribution of money appropriated for certain agricultural societies.

Became a law May 9, 1895, with the approval of the Governor. Passed, three-fifths being present.

The People of the State of New York, represented in Senate and Assembly, do enact as follows:

Section 1. The agricultural law, chapter three hundred and thirty-eight of the laws of eighteen hundred and ninety-three, is hereby amended by inserting therein a new section, eighty-nine, to read as follows:

§ 89. Distribution of money appropriated for certain agricultural societies. Whenever in any year there shall be appropriated the sum of twenty thousand dollars or more for the benefit of the several agricultural societies, clubs or expositions of the State, two thousand dollars of such amount shall be paid to every such society, club or exposition, which shall have held annual fairs or meetings during each of the three years next preceding such appropriation and which shall have paid at each of such annual fairs or meetings, during such three years, the sum of three thousand dollars as premiums for agricultural interests, exclusive of the premiums paid for trials or tests of speed, skill or endurance of man or beast. Such society, club or exposition shall annually before the first day of December in each year file in the office of the commissioner of agriculture a statement, verified by its president and treasurer, showing the payment of such premiums, with the amount and object thereof, together with the name of the persons to whom they were paid. A similarly verified duplicate of such statement shall be filed in the office of the comptroller. There shall at the same time be filed in the office of the comptroller a written offer to the effect that such society, club or exposition will act as the agent of the State for the distribution and payment of the money so appropriated as premiums at its annual fair or meeting for the promotion of agricultural interests, together with a bond executed to the people of the State, signed in

its name by the president and treasurer thereof, in such amount and with such sureties as the comptroller shall approve, conditioned for the faithful performance of its duties as such agent. Any such society, club or exposition receiving such sum of two thousand dollars as herein provided shall not receive any portion of the moneys collected from racing associations or moneys already appropriated for the benefit of county agricultural societies.

§ 2. This act shall take effect immediately.

CHAPTER 820.

AN ACT to amend the agricultural law relative to the distribution of funds collected from associations incorporated for the purpose of improving the breed of horses, and making an appropriation in accordance therewith.

Became a law May 29, 1895, with the approval of the Governor. Passed, three-fifths being present.

The People of the State of New York, represented in Senate and Assembly, do enact as follows:

Section 1. Section eighty-eight of the agricultural law, as amended by chapter two hundred and forty-one of the laws of eighteen hundred and ninety-four, is hereby amended to read as follows:

(*Amended by section* 1 *of chapter* 221 *of the Laws of* 1896, *section* 1 *of chapter* 589 *of the Laws of* 1897, *chapter* 494 *of the Laws of* 1898, *and chapters* 87 *and* 339 *of the Laws of* 1900.)

§ 88. Receipts and apportionment of moneys for the promotion of agriculture. Money appropriated for the promotion of agriculture in this state, the distribution of which is not otherwise provided for by law shall be apportioned and distributed by the commissioner of agriculture among the various county agricultural societies and the American Institute in the City of New York as follows: One-half thereof shall be apportioned and dis-

tributed equally and the remainder in proportion to the actual premiums paid during the previous year by such societies and institute, exclusive of premiums paid for trials or tests of speed, skill or endurance of man or beast. All revenues collected by the state comptroller and yet undistributed from the tax collected from racing associations, pursuant to chapter one hundred and ninety-seven of the laws of eighteen hundred and ninety-four, shall constitute a fund which shall be disbursed on behalf of the state for prizes for improving the breed of cattle, sheep and horses at the various fairs throughout the state, as hereinafter prescribed. Twenty-five per centum of the funds so collected shall be disbursed by the commissioner of agriculture among the agricultural societies, clubs or expositions of the state, which have not, previous to the passage of this act, received appropriations from the state as follows: One-third shall be apportioned and distributed equally, and the remainder in proportion to annual premiums paid during the past year by such society. Such sum shall only be paid to societies which have held fairs annually during each of the three years next preceding the passage of this act, and which have paid at their annual meeting or fairs during such three years, not less than one thousand dollars in the aggregate as premiums for agriculture, mechanical and domestic products, exclusive of the premiums paid for trials or tests of speed, skill or endurance of man or beast, and which shall file a statement of the amounts actually paid as such premiums during the past year, duly verified by the president and treasurer, with the commissioner of agriculture and the comptroller on or before the first day of July, eighteen hundred and ninety-five. Seventy-five per centum of such funds shall be disbursed by the commissioner of agriculture among the various county agricultural societies throughout the state, and the American Institute, in the city of New York, as follows: One-half shall be apportioned and distributed equally, and the remainder in proportion to the actual premiums paid during the previous year by such societies and institute, exclusive of premiums paid for trials or tests of speed, skill or endurance of man or beast. If there is no county agricultural society in any county, or it is not

in active operation as such, the money which the county society of such county would be entitled to receive under this article, shall be apportioned among and paid to the several town or other agricultural societies in such county according to the amount of premiums paid, provided such town societies sustain a public fair, with premium-list, which premium-list and reports of such town fairs shall be forwarded and made to the commissioner of agriculture. All revenues, which shall be received by the comptroller, and not distributed as heretofore provided, and all moneys received by him from the tax collected from racing associations pursuant to chapter one hundred and ninety-seven of the laws of eighteen hundred and ninety-four, or hereafter otherwise collected from racing associations, corporations or clubs, shall constitute a fund which shall be annually disbursed on behalf of the state for prizes for improving the breed of cattle, sheep and horses at the various fairs throughout the state as hereinafter prescribed. Thirty per centum of the funds so collected shall be disbursed by the commissioner of agriculture among the agricultural societies, clubs or expositions of the state, which have not, previous to the passage of this act, received appropriations from the state, as follows: One-third shall be apportioned and distributed equally and the remainder in proportion to annual premiums paid during the previous year by such society. Such sums shall only be paid to societies which shall have held fairs annually during each of the three years next preceding the passage of this act, and which shall have paid at their annual meeting or fairs during such three years not less than one thousand dollars in the aggregate as premiums for agricultural, mechanical and domestic products, exclusive of the premiums paid for trials or tests of speed, skill or endurance of man or beast. Seventy per centum of such funds shall be disbursed by the commissioner of agriculture among the various county agricultural societies throughout the state, and the American Institute, in the city of New York, as follows: One-half shall be apportioned and distributed equally, and the remainder in proportion to the actual premiums paid during the previous years by such societies and institute, exclusive of premiums paid for trials or tests of speed,

skill or endurance of man or beast. If there is no county agricultural society in the county, or it is not in active operation as such, the money which the county society of such county would be entitled to receive under this act, shall be apportioned among and paid to the several town or other agricultural societies in such county according to the amount of premiums paid, provided such town societies sustain a public fair, with premium-lists, and reports of such town fairs shall be forwarded and made to the commissioner of agriculture. All societies other than county agricultural societies shall hereafter on or before the first day of December in each year, file a statement in duplicate, duly verified by the president and treasurer, showing the amount of premiums paid at the last annual fair, exclusive of premiums paid for trials or tests of speed, skill or endurance of man or beast, one of which statements shall be filed in the office of the commissioner of agriculture and the other in the office of the comptroller, and no such society shall be hereafter entitled to receive such appropriations in any year in which the actual amount paid by it as such premiums is less than five hundred dollars.

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CHAPTER 821.

AN ACT to amend the executive law, relating to the duties and powers of the attorney-general.

Became a law May 29, 1895, with the approval of the Governor. Passed, three-fifths being present.

The People of the State of New York, represented in Senate and Assembly, do enact as follows:

Section 1. Subdivisions one and two of section fifty-two of the executive law, is hereby amended to read as follows:

1. Prosecute and defend all actions and proceedings in which the State is interested, and have charge and control of all the legal business of the departments and bureaus of the State, or of any office thereof which requires the services of attorney or counsel, in

order to protect the interests of the State, but this section shall not apply to any of the military department bureaus or military offices of the State.

2. Whenever required by the governor, attend in person, or by one of his deputies, a court of oyer and terminer or appear before the grand jury thereof for the purpose of managing and conducting in such court or before such jury such criminal actions or proceedings as shall be specified in such requirement; in which case the attorney-general or his deputy so attending shall exercise all the powers and perform all the duties in respect of such actions or proceedings, which the district attorney would otherwise be authorized or required to exercise or perform; and in any of such actions or proceedings the district attorney shall only exercise such powers and perform such duties as are required of him by the attorney-general or the deputy attorney-general so attending.

§ 2. Section 55 of said executive law is hereby amended to read as follows:

§ 55. Additional counsel. The governor, or attorney-general may designate and employ such additional attorneys or counsel as may be necessary to assist in the transaction of any of the legal business mentioned in section fifty-two of this act and such attorneys or counsel shall be paid from the treasury a reasonable fee upon the certificate of the governor and attorney-general, the amount thereof to be audited and allowed by them or may be paid by the attorney-general out of the costs recovered by him.

§ 3. This act shall take effect immediately.

LAWS OF 1896.

CHAPTER 221.

AN ACT to amend chapter three hundred and thirty-eight of the laws of eighteen hundred and ninety-three, entitled "An act in relation to agriculture, constituting articles one, two, three, four and five of chapter thirty-three of the general laws," and the acts amendatory thereof, relative to the apportionment of moneys appropriated for the promotion of agriculture.

Became a law April 8, 1896, with the approval of the Governor. Passed, three-fifths being present.

The People of the State of New York, represented in Senate and Assembly, do enact as follows:

Section 1. Section eighty-eight of article five of chapter three hundred and thirty-eight of the laws of eighteen hundred and ninety-three, as amended by chapter two hundred and forty-one of the laws of eighteen hundred and ninety-four, as amended by chapter eight hundred and twenty of the laws of eighteen hundred and ninety-five, known as the agricultural law, constituting articles one, two, three, four and five of chapter thirty-three of the general laws, is hereby amended to read as follows:

(*Amended by section* 1 *of chapter* 589 *of the Laws of* 1897, *chapter* 494 *of the Laws of* 1898, *and chapters* 87 *and* 339 *of the Laws of* 1900.)

§ 88. Receipts and apportionment of moneys for the promotion of agriculture. Of all moneys appropriated for the promotion of agriculture in any one year, twenty thousand dollars thereof shall be distributed in premiums by the New York State Agricultural society; two thousand dollars thereof shall be paid to each of the agricultural societies, clubs or exhibitions which shall have held annual fairs or meetings during each of the three years next preceding such appropriation, and which shall have

paid at each of such annual fairs or meetings during such three years the sum of three thousand dollars as premiums for agricultural interests, exclusive of the premiums paid for trials or tests of speed, skill or endurance of man or beast, under the conditions and in the manner provided by section eighty-nine of this chapter. Seventy per centum of the balance of the amount so appropriated shall be apportioned and distributed among the various county agricultural societies and the American Institute in the city of New York; and thirty per centum thereof among the various town and other agricultural societies, clubs or exhibitions, entitled by this section to receive thirty per centum of the moneys received by the comptroller from the tax collected from the racing associations, corporations or clubs of the State. Such apportionment and distribution shall be made by the commissioner of agriculture in the following manner. One-half of the seventy per centum to be apportioned to such county agricultural societies and the American Institute in the city of New York shall be apportioned and distributed equally and the remainder in proportion to the actual premiums paid during the previous year by such societies and institute, exclusive of premiums paid for trials or tests of speed, skill or endurance of man or beast. If there is no county agricultural society in any county or if it is not in active operation as such, then the town society or societies in such county, or other agricultural societies in such county that would otherwise be entitled to share under the thirty per centum distribution referred to in this section, shall share jointly in the distribution of such money on the same basis as they would if they were a county fair, provided such town societies sustain a public fair, with premium list, which premium list and reports of such town fairs shall be forwarded and made to the commissioner of agriculture. Of the thirty per centum to be distributed among the various town and other agricultural societies, clubs or exhibitions, one-third thereof shall be apportioned and distributed equally and the remainder in proportion to the premiums awarded and paid by said society, club or exposition for exhibits made at the annual fair upon the awards or premiums of which they seek a portion of the money

to be distributed, exclusive of premiums paid for trials or tests of speed, skill or endurance of man or beast. No proportion of such amount shall be paid to any such society, club or exhibition in which the actual amount paid by it as such premiums in the year preceding such apportionment, is less than five hundred dollars. All revenues which have been or shall be received by the comptroller, and not distributed as heretofore provided, and all moneys received by him from the tax collected from racing associations pursuant to chapter one hundred and ninety-seven of the laws of eighteen hundred and ninety-four, and chapter five hundred and seventy of the laws of eighteen hundred and ninety-five, and all acts amendatory thereto, or hereafter otherwise collected from racing associations, corporations or clubs, shall constitute a fund which shall be annually disbursed on behalf of the state for prizes for improving the breed of cattle, sheep and horses at the various fairs throughout the state as hereinafter prescribed. Thirty per centum of the funds so collected shall be disbursed by the commissioner of agriculture among the agricultural societies, clubs or exhibitions of the state, which had not previous to May twenty-ninth, eighteen hundred and ninety-five, received appropriations from the state, as follows: One-third shall be apportioned and distributed equally and the remainder in proportion to the premiums awarded and paid by said society, club or exposition for exhibits made at the annual fair upon the awards or premiums of which they seek a portion of the money to be distributed. Such sums shall only be paid to societies now organized and in active operation in counties having a population according to the census of eighteen hundred and ninety-two of over three hundred and twenty-five thousand inhabitants, or which shall have held fairs, annually, during each of the three years prior to May twenty-ninth, eighteen hundred and ninety-five, and which shall have paid, at their annual meeting or fairs during such three years, not less than one thousand dollars in the aggregate as premiums for agricultural, mechanical and domestic products, exclusive of the premiums paid for trials or tests of speed, skill or endurance of man or beast. Seventy per centum of such funds shall be disbursed by the commissioner of agriculture among the various

county agricultural societies throughout the state, and the American Institute, in the city of New York, as follows: One-half shall be apportioned and distributed equally, and the remainder in proportion to the premiums awarded and paid by said society, club or exposition, for exhibits made at the annual fair upon the awards or premiums of which they seek a portion of the money to be distributed, exclusive of premiums paid for trials or tests of speed, skill or endurance of man or beast. If there is no county agricultural society in any county or it is not in active operation as such, then the town society or societies in such county or other agricultural societies in such county that would otherwise be entitled to share under the thirty per centum distribution referred to in this section, shall share jointly in the distribution of such money on the same basis as they would if they were a county fair, provided such town societies sustain a public fair, with premium lists and reports of such town fairs shall be forwarded and made to the commissioner of agriculture. All such societies shall hereafter, on or before the fifteenth day of December in each year, file a statement duly verified by the secretary and treasurer, showing the amount of premiums paid at the last annual fair, exclusive of premiums paid for trials or tests of speed, skill or endurance of man or beast, which statement shall be filed in the office of the commissioner of agriculture. No such society, other than a county society, shall be hereafter entitled to receive such appropriations in any year in which the actual amount paid by it as such premium is less than five hundred dollars. Any town or other agricultural society in a county in which there is no agricultural society and which, according to the terms of this section receives any portion of the seventy per centum of such funds apportioned to county agricultural societies, shall not receive the portion of the thirty per centum of such funds which they would be otherwise entitled to receive. Any society, club or exposition, except the New York State Agricultural society, receiving the sum of two thousand dollars under the provisions of section eighty-nine of this act, shall not receive any other portion of the money appropriated for the promotion of agriculture.

§ 2. The sum of twenty-seven thousand two hundred and thir-

teen dollars and fifty-five cents, being the sum collected from racing associations in pursuance of chapter four hundred and seventy-nine of the laws of eighteen hundred and eighty-seven, as amended by chapter one hundred and ninety-seven of the laws of eighteen hundred and ninety-four, and chapter five hundred and seventy of the laws of eighteen hundred and ninety-five, is hereby appropriated out of any moneys in the treasury, not otherwise appropriated, to be distributed in the manner provided by section eighty-eight of the agricultural law, as hereby amended, and in the proportion provided by this act for the distribution of moneys collected as hereinbefore recited. Such money shall be payable by the treasurer on the warrant of the comptroller on the order of the commissioner of agriculture.

§ 3. This act shall take effect immediately.

CHAPTER 955.

AN ACT for the protection and education of farmers and manufacturers in the purchase and sale of fertilizers.

Became a law May 28, 1896, with the approval of the Governor. Passed, three-fifths being present.

The People of the State of New York, represented in Senate and Assembly, do enact as follows:

Section 1. Every person who shall sell, offer or expose for sale in this state any commercial fertilizer or any material to be used as a fertilizer, the selling price of which exceeds ten dollars per ton, shall stamp on or affix to each package of such fertilizer, in a conspicuous place on the outside thereof, a plainly printed statement which shall certify as follows:

1. The number of net pounds of fertilizer in the package sold or offered for sale;

2. The name, brand, or trade mark under which the fertilizer is sold;

3. The name and address of the manufacturer of the fertilizer;

4. The chemical composition of the fertilizer expressed in the following terms:

(a) Per centum of nitrogen;

(b) Per centum of available phosphoric acid, or, in case of undissolved bone, the per centum of total phosphoric acid;

(c) Per centum of potash soluble in distilled water.

If any such fertilizer be sold, offered or exposed for sale in bulk, such printed statement shall accompany every lot and parcel so sold, offered or exposed for sale.

§ 2. It shall be a violation of the provisions of this act if the statement required by section one of this act shall be false in regard to the number of net pounds of fertilizer in the package sold, offered or exposed for sale, or in the name, brand or trade-mark under which the fertilizer is sold, or in the name and address of the manufacturer of the fertilizer. It shall also be a violation of the provisions of this act if any commercial fertilizer or material to be used as a fertilizer shall contain a smaller percentage of nitrogen, phosphoric acid or potash than is certified in said statement to be contained therein, when such deficiency shall be greater than one-third of one per centum of nitrogen, or one-half of one per centum of available phosphoric acid (or one per centum of total phosphoric acid in the case of undissolved bone), or one-half of one per centum of potash soluble in distilled water.

§ 3. Before any commercial fertilizer or any material to be used as a fertilizer is sold, offered or exposed for sale in this state, the manufacturer, importer or person who causes the same to be sold, offered or exposed for sale shall file with the New York agricultural experiment station at Geneva, a certified copy of the statement prescribed in section one of this act; and, in addition, such statement shall be filed thereafter annually during the month of January.

§ 4. No person shall sell, offer or expose for sale in this state leather or its products or other inert nitrogenous material in any form, as a fertilizer or as an ingredient of any fertilizer, unless an explicit printed statement of the fact shall be conspicuously affixed to every package of such fertilizer, and shall accompany every parcel or lot of the same.

§ 5. Every person violating any of the provisions of this act shall forfeit and pay to the people of the state of New York the sum of one hundred dollars for every such violation.

§ 6. Every certificate, duly signed and acknowledged, of a chemist or other expert employed by the director of the New York agricultural experiment station at Geneva relating to the analysis of any commercial fertilizer or material to be used as a fertilizer, shall be presumptive evidence of the facts therein stated.

§ 7. The doing of anything prohibited by this act shall be evidence of the violation of the provisions of this act relating to the thing so prohibited and the omission to do anything directed to be done shall be evidence of a violation of the provisions of this act relative to the things so directed to be done.

§ 8. The director of the New York agricultural experiment station at Geneva is charged with the enforcement of the provisions of this act, and for this purpose, may employ agents, chemists and experts, and whenever he shall know or have reason to believe that any penalty has been incurred by any person for the violation of any of the provisions of this act, or that any sum has been forfeited by reason of any such violation, he shall report the said violation with a statement of the facts to the attorney general, who, pursuant to the provisions of chapter eight hundred and twenty-one of the laws of eighteen hundred and ninety-five may cause an action or proceeding to be brought in the name of the people for the recovery of the same.

§ 9. Chapter four hundred and thirty-seven of the laws of eighteen hundred and ninety and chapter six hundred and one of the laws of eighteen hundred and ninety-four are hereby repealed.

§ 10. This act shall take effect immediately.

LAWS OF 1897.

CHAPTER 128.

AN ACT making an appropriation for the promotion of agriculture by the college of agriculture of Cornell university.

Became a law March 25, 1897, with the approval of the Governor. Passed, three-fifths being present.

The People of the State of New York, represented in Senate and Assembly, do enact as follows:

Section 1. For the promotion of agricultural knowledge throughout the state, the sum of twenty-five thousand dollars, or so much thereof as may be necesssary, is hereby appropriated out of any money in the treasury not otherwise appropriated to be paid to the college of agriculture at Cornell university to be expended in giving instruction throughout the state by means of schools, lectures and other university extension methods, or otherwise, and in conducting investigations and experiments; in discovering the diseases of plants and remedies; in ascertaining the best method of fertilization of fields, gardens and plantations; and best modes of tillage and farm management and improvement of live stock; and in printing leaflets and disseminating agricultural knowledge by means of lectures or otherwise; and in preparing and printing for free distribution the results of such investigations and experiments; and for republishing such bulletins as may be useful in the furtherance of the work; and such other information as may be deemed desirable and profitable in promoting the agricultural interests of the state. Such college of agriculture may, with the consent and approval of the commissioner of agriculture, employ teachers and experts and necessary clerical help to assist in carrying out the purposes of this bill. Such teachers, experts and clerical help may be removed by the college of agriculture in its discretion; and may be paid for their services such sum or sums as may be deemed reasonable and proper and as shall be approved by the commissioner of agriculture. All of such work by such teach-

ers and experts who shall be employed under this bill shall be under the general supervision and direction of the commissioner of agriculture. The sum appropriated by this act shall be paid by the treasurer of the state upon the warrant of the comptroller to the treasurer of the Cornell university, upon such treasurer filing with the comptroller a bond in such sum and with such sureties as the comptroller may approve, conditioned for the faithful application of such sum to the purposes for which the same is hereby appropriated. Such sum shall be payable by the treasurer of Cornell university upon vouchers approved by the officers or agents of such university having charge of such college of agriculture, and such vouchers shall be filed by the treasurer of Cornell university in the office of the comptroller of the state.

§ 2. This act shall take effect immediately.

CHAPTER 500.

AN ACT to amend the agricultural law, relative to the promotion of sugar beet culture by scientific and practical experiment, and making an appropriation therefor.

Became a law May 18, 1897, with the approval of the Governor. Passed three-fifths being present.

The People of the State of New York, represented in Senate and Assembly, do enact as follows:

Section 1. Chapter three hundred and thirty-eight of the laws of eighteen hundred and ninety-three, entitled "An act in relation to agriculture, constituting articles one, two, three, four and five of chapter thirty-three of the general laws," is hereby amended by inserting after article four, a new article to be known as article five, and to read as follows:

ARTICLE V.

SUGAR BEET CULTURE.

Section 71. Commissioner of agriculture to apportion moneys appropriated for promotion of sugar beet culture.
72. Persons, et cetera, to whom moneys may be apportioned.
73. Statements; inspections, branding of packages.
74. Inspectors, to be appointed by commissioner.
75. Weighman, powers and duties.
76. Apportionment of moneys by commissioners of agriculture.

Section 71. **Commissioners of agriculture to apportion moneys appropriated for promotion of sugar beet culture.** Money appropriated for the promotion of sugar beet culture by scientific and practical experiment shall be apportioned by the commissioners of agriculture to the persons, firms, associations or corporations entitled thereto, according to the provisions of this article.

(*Amended by section* 1 *of chapter* 303 *of the Laws of* 1899.)

§ 72. **Persons, et cetera, to whom moneys may be distributed.** Any person, firm, association or corporation, engaged in the manufacture of sugar from beets grown in the state of New York, upon registration in the office of the commissioner of agriculture, and filing a certificate therein, stating the name of such person, firm, association or corporation, the location of the factory, and the capacity thereof, and the time when the manufacture of sugar began or is to begin, shall be entitled to a distributive share of the amount appropriated for the promotion and encouragement of sugar beet culture, as provided in this article. No such person, firm, association or corporation shall receive any portion of the moneys so appropriated, unless all the beets used in the manufacture of such sugar are grown within the state of New York, and unless the grower received therefor a net sum of not less than five dollars per ton, and provided such beets are not grown by the manufacturer of such sugar. No money shall be distributed to such manufacturers, unless the sugar manufactured by them shall contain at least ninety per centum of crystallized sugar. The commissioner of agriculture may expend such sum or sums as he may deem necessary or expedient, not exceeding ten per centum of the amount appropriated for the purposes of this article, in practical and scientific experiments in growing sugar beets in one or more sections of this state, for the purpose of determining the adaptability of the soil thereof for the production of sugar beets.

§ 73. **Statements; inspections, branding of packages.** The quantity and quality of sugar upon which said money is to be paid shall be determined by the commissioner of agriculture of this state, with whom all claimants shall, from time to time, file verified statements showing the quantity and quality of sugar

manufactured by them, the price paid the producer for beets and upon which said money is claimed. The said commissioner shall, without unnecessary delay, visit or cause to be visited by such persons as he shall designate in writing, the factory where said sugar has been produced or manufactured, and take such evidence by the sworn testimony of the officers or employes of such factory or others, as to the amount and quality of sugar so manufactured, and the price paid for beets as to him or the person so designated by him shall appear satisfactory and conclusive. The sugar so manufactured shall be placed by the manufacturer in original packages, which shall be examined and branded by the said commissioner or person by him designated, with a suitable brand, showing the quantity and the quality of sugar contained in each of said packages, of which an accurate account shall be kept by said inspector, and filed in the office of the commissioner of agriculture of this state.

§ 74. Inspectors, to be appointed by commissioner. It shall be the duty of the commissioner of agriculture to appoint a resident inspector in each town or city where one or more manufactories of sugar may be located in this state, the aggregate output of which factories shall exceed two thousand pounds of sugar per day, and such examiner shall make such examinations, take such evidence and make such records and reports as is specified in section two of this act. The compensation or fee for such service of said inspector shall not exceed the sum of twenty-five cents for each package so branded, nor the sum of five dollars per day for any one day's service, and such resident inspector shall be required to give a good and sufficient bond in the sum of not less than two thousand dollars to the state of New York, contingent on the faithful performance of his duties, said bond to be approved by the said commissioner of agriculture. Said fees or compensation, together with the cost of said brand and any and all analysis that the said commissioner of agriculture or other authorized inspector shall require to be made, shall be borne and paid by the claimant of said money.

(*Amended by section* 1 *of chapter* 101 *of the Laws of* 1899.)

§ 75. Weighman, powers and duties. It shall be the duty of the commissioner of agriculture to appoint at each sugar

manufactory in this state where the output of such manufactory shall exceed two thousand pounds of sugar per day, a person who shall weigh all beets received by the person or persons, corporation or association operating said manufactory. Such person shall be known as the weighman, and he shall keep accurate record of all duties performed by him. He shall discharge all duties pertaining to his position in an impartial manner, and shall furnish the commissioner of agriculture with a good and sufficient bond in the sum of two thousand dollars for the faithful discharge of his duties as prescribed by this act. The commissioner of agriculture may appoint such person or persons to assist said weighman as the service to be performed may require. Each person so appointed shall give bond as provided by this section. The weighman shall take into his possession, promptly on receipt of beets at such manufactory, such samples of beets as he deems fair and equitable, from which to remove dirt or other dockage. He shall then promptly weigh all beets from which samples have been taken and keep an accurate record of all weights, and all of such records shall show the names of both the seller and the buyer. The weights furnished by said weighman shall be accepted by both the seller and the buyer, and upon such weights so furnished settlement between the seller and the buyer shall be made. The compensation or fee allowed such weighman shall not exceed the sum of five dollars per day for time actually employed and for his assistants a sum not to exceed three dollars per day for the time actually employed. All expenses arising from the duties of said weighman or his assistants, as prescribed by this act, shall be paid by the person or persons, corporation or association operating such manufactory where such expense is incurred.

§ 76. **Distribution of moneys by commissioner of agriculture.** On or before the first day of February in each year, the commissioner of agriculture shall prepare a detailed statement of the quantity of sugar manufactured by each person, firm or association or corporation entitled to receive a portion of the moneys appropriated for the promotion and encouragement of sugar beet culture. He shall apportion to each such person, firm, association or corporation the moneys so appropriated according to the amount of sugar of the grade described in this article manufac-

tured by each of them, during the preceding year. Not more than one cent a pound shall be paid in any one year on account of the sugar so manufactured. Such commissioner of agriculture shall certify to the comptroller the amount apportioned to each manufacturer of sugar according to the provisions of this article; and the comptroller shall draw his warrant upon the state treasurer for the amount so certified, payable to the party or parties to whom such apportionment was made.

§ 2. Articles five and six of said act are hereby made articles six and seven.

§ 3. The sum of twenty-five thousand dollars, or so much thereof as may be necessary, is hereby appropriated out of any moneys in the treasury not otherwise appropriated, to be paid in the manner prescribed in this act for the purpose of making effectual the provisions thereof.

§ 4. This act shall take effect immediately.

CHAPTER 554.

AN ACT to amend chapter three hundred and thirty-eight of the laws of eighteen hundred and ninety-three, entitled "An act in relation to agriculture, constituting articles one, two, three, four and five of chapter thirty-three of the general laws," and the penal code, relative to violations of the agricultural law.

Became a law May 18, 1897, with the approval of the Governor. Passed, three-fifths being present.

The People of the State of New York, represented in Senate and Assembly, do enact as follows:

Section 1. Section thirty-seven of chapter three hundred and thirty-eight of the laws of eighteen hundred and ninety-three, entitled "An act in relation to agriculture, constituting articles one, two, three, four and five of chapter thirty-three of the general laws," is hereby amended so as to read as follows:

(*Amended by chapter* 558 *of the Laws of* 1898, *chapter* 435 *of the Laws of* 1899, *and chapters* 76 *and* 559 *of the Laws of* 1900.)

§ 37. Every person violating any of the provisions of this article shall forfeit to the people of the state of New York the sum of

not exceeding one hundred dollars for every such violation. When such violation consists of the manufacture or production of any prohibited article, each day during which or any part of which such manufacture or production is carried on or continued, shall be deemed a separate violation of the provisions of this article. When the violation consists of the sale, or the offering or exposing for sale or exchange of any prohibited article or substance, the sale of each one of several packages shall constitute a separate violation, and each day on which any such article or substance is offered or exposed for sale or exchange, shall constitute a separate violation of this article. When the use of any such article or substance is prohibited, each day during which or any part of which said article or substance is so used or furnished for use, shall constitute a separate violation, and the furnishing of the same for use to each person to whom the same may be furnished shall constitute a separate violation. Whoever by himself or another violates any of the provisions of article two of said chapter, shall be guilty of a misdemeanor, and upon conviction shall be punished by a fine of not less than twenty-five dollars, nor more than two hundred dollars, or by imprisonment of not less than one month nor more than six months or by both such fine and imprisonment, for the first offense; and by six months imprisonment for the second offense; and any person who violates any of the provisions of article three of said chapter, is guilty of a misdemeanor, and shall be punished by a fine of not less than fifty dollars, nor more than one hundred dollars; and in addition thereto shall forfeit to the people of the state of New York, the sum of one hundred dollars for every such violation.

§ 2. Section four hundred and eight-a of the penal code is hereby amended so as to read as follows:

§ 408a. Violations of the agricultural law. Any person who disregards, disobeys or violates any proclamation, notice, order or regulation, lawfully issued or prescribed by the commissioner of agriculture, for the suppression or prevention of the spread of infectious or contagious diseases among domestic animals, or who violates any of the provisions of sections eighty and eighty-two of article five of the agricultural law, is guilty of a misdemeanor.

§ 3. This act shall take effect immediately.

CHAPTER 589.

AN ACT to amend chapter three hundred and thirty-eight of the laws of eighteen hundred and ninety-three, entitled "An act in relation to agriculture, constituting articles one, two, three, four and five of chapter thirty-three of the general laws," as amended by chapter two hundred and twenty-one of the laws of eighteen hundred and ninety-six, relative to the apportionment of moneys appropriated for the promotion of agriculture.

Became a law May 19, 1897, with the approval of the Governor. Passed, three-fifths being present.

The People of the State of New York, represented in Senate and Assembly, do enact as follows:

Section 1. Section eighty-eight of article five of chapter three hundred and thirty-eight of the laws of eighteen hundred and ninety-three, as amended by chapter two hundred and twenty-one of the laws of eighteen hundred and ninety-six, is hereby amended to read as follows:

(*Amended by section* 1 *of chapter* 494 *of the Laws of* 1898, *and chapters* 87 *and* 339 *of the Laws of* 1900.)

§ 88. **Receipts and apportionment of moneys for the promotion of agriculture.** Of all moneys appropriated for the promotion of agriculture in any one year, twenty thousand dollars thereof shall be distributed in premiums by the New York State Agricultural Society; two thousand dollars thereof shall be paid to each of the agricultural societies, agricultural clubs, or agricultural expositions which shall have held annual agricultural fairs or meetings during each of the three years next preceding such appropriation, and which shall have paid at each of such annual fairs or meetings during such three years the sum of three thousand dollars as premiums for agricultural interests, exclusive of the premiums paid for trials or tests of speed, skill or endurance of man or beast, under the conditions and in the manner provided by section eighty-nine of this chapter. Seventy per centum of the balance of the amount so appropriated shall be apportioned and distributed among the various county agricultural societies and the American Institute in the city of New York; and thirty per

centum thereof among the various towns and other agricultural societies, agricultural clubs or agricultural expositions entitled by this section to receive thirty per centum of the moneys received by the comptroller from the tax collected from the racing associations, corporations or clubs of the state. Such apportionment and distribution shall be made by the commissioner of agriculture in the following manner: One-half of the seventy per centum to be apportioned to such county agricultural societies and the American Institute in the city of New York shall be apportioned and distributed equally and the remainder in proportion to the actual premiums paid during the previous year by such societies and institute, exclusive of premiums paid for trials or tests of speed, skill or endurance of man or beast. If there is no county agricultural society in any county, or if the county agricultural society is not in active operation as such, then the town society or societies in such county, or other agricultural societies in such county, except the New York State Agricultural Society, that would otherwise be entitled to share under the thirty per centum distribution referred to in this section, shall share jointly in the distribution of such money on the same basis as they would if they were a county agricultural society, provided such societies sustain a public fair with premium list, which premium list and reports of such societies shall be forwarded and made to the commissioner of agriculture. Of the thirty per centum to be distributed among the various town and other agricultural societies, clubs or expositions one-third thereof shall be apportioned and distributed equally and the remainder in proportion to the premiums awarded and paid by said society, club or exposition for exhibits made at the annual fair upon the awards or premiums of which they seek a portion of the money to be distributed, exclusive of premiums paid for trials or tests of speed, skill or endurance of man or beast. No proportion of such amount shall be paid to any such society, club or exposition in which the actual amount paid by it as such premiums in the year preceding such apportionment, is less than five hundred dollars. All revenues which have been or shall be received by the comptroller, and not distributed as heretofore provided, and all moneys received by him from the tax collected from racing associa-

tions pursuant to chapter one hundred and ninety-seven of the laws of eighteen hundred and ninety-four, and chapter five hundred and seventy of the laws of eighteen hundred and ninety-five, and all acts amendatory thereto, or hereafter otherwise collected from racing associations, corporations or clubs, shall constitute a fund, which shall be annually disbursed on behalf of the state for prizes for improving the breed of cattle, sheep and horses at the various fairs throughout the state as hereinafter prescribed. Thirty per centum of the funds so collected shall be disbursed by the commissioner of agriculture among the agricultural societies, agricultural clubs or agricultural expositions of the state, which had not previous to May twenty-ninth, eighteen hundred and ninety-five, received appropriations from the state, as follows: One-third shall be apportioned and distributed equally and the remainder in proportion to the premiums awarded and paid by said society, club or exposition for exhibits made at the annual fairs upon the awards or premiums of which they seek a portion of the money to be distributed, such sums shall only be paid to such societies which have received appropriations from the state previous to the passage of this act, and are now duly organized under the laws of the state of New York, and in active operation in counties having a population according to the census of eighteen hundred and ninety-two of over three hundred and twenty-five thousand inhabitants, or which shall have held fairs, annually, during each of the three years prior to May twenty-ninth, eighteen hundred and ninety-five, and which shall have paid, at their annual meetings or fairs during such three years, not less than one thousand dollars in the aggregate as premiums for agriculture, mechanical and domestic products, exclusive of the premiums paid for trials or tests of speed, skill or endurance of man or beast, and which shall have filed their report with the commissioner of agriculture, on or before July first, eighteen hundred and ninety-five, as heretofore provided in chapter eight hundred and twenty of the laws of eighteen hundred and ninety-five. Seventy per centum of such funds shall be disbursed by the commissioner of agriculture among the various county agricultural societies throughout the state, and the American Institute, in the city of New York, as follows: One-half shall be apportioned and distributed equally, and the remainder in proportion to the pre-

miums awarded and paid by said society, club or exposition, for exhibits made at the annual fair upon the awards or premiums of which they seek a portion of the money to be distributed, exclusive of premiums paid for trials or tests of speed, skill or endurance of man or beast. If there is no county agricultural society in any county, or if the county agricultural society is not in active operation as such, then the town society or societies in such county, or other agricultural societies in such county, except the New York State Agricultural Society, that would otherwise be entitled to share under the thirty per centum distribution referred to in this section, shall share jointly in the distribution of such money on the same basis as they would if they were a county agricultural society, provided such societies sustain a public fair, with premium list and reports of such societies shall be forwarded and made to the commissioner of agriculture. All agricultural societies, agricultural clubs or agricultural expositions entitled to receive any portion of the moneys appropriated by the state must hereafter, on or before the fifteenth day of December, in each year, file a statement, duly verified by the secretary and treasurer, showing the amount of premiums paid at the last annual fair, exclusive of premiums paid for trials or tests of speed, skill or endurance of man or beast, which statement shall be filed in the office of the commissioner of agriculture, otherwise such society, club or exposition shall forfeit its right to participate in the distribution of such moneys for premiums paid for such year. No proportion of such moneys shall be paid to any such society, club or exposition in which the actual amount paid by it as such premiums in the year preceding such apportionment, is less than five hundred dollars. Any town or other agricultural society in a county in which there is no county agricultural society in active operation and which, according to the terms of this section receives any portion of the seventy per centum of such funds apportioned to county agricultural societies, shall not receive any portion of the thirty per centum of such funds. Any such society, club or exposition, receiving the sum of two thousand dollars under the provisions of section eighty-nine of this act, shall not receive any other portion of the money appropriated for the promotion of agriculture. Any such agricultural society, agri-

cultural club, agricultural exposition, or agricultural fair association, organized under the laws of the State of New York, which shall fail or neglect to hold annual fairs and file their annual reports, as provided by this law, with the commissioner of agriculture for two consecutive years, shall forfeit all of their chartered rights, including any privileges or moneys they might thereafter otherwise be entitled to under this act.

§ 2. The sum of fifty thousand dollars of the amount collected and due from racing associations in pursuance of chapter four hundred and seventy-nine of the laws of eighteen hundred and eighty-seven as amended by chapter one hundred and ninety-seven of the laws of eighteen hundred and ninety-four, and chapter five hundred and seventy of the laws of eighteen hundred and ninety-five and all acts amendatory thereof or supplementary thereto is hereby appropriated out of any moneys in the treasury so collected at the time of the distribution thereof as provided herein. Such sum shall be distributed in the manner provided by section eighty-eight of the agricultural law, as amended, and in the proportion provided therein for the distribution of such moneys, and shall be payable by the treasurer on the warrant of the comptroller on the order of the commissioner of agriculture.

§ 3. All acts and parts of acts inconsistent with the provisions of this act are hereby repealed.

§ 4. This act shall take effect immediately.

CHAPTER 768.

AN ACT to amend chapter three hundred and thirty-eight of the laws of eighteen hundred and ninety-three, entitled "An act in relation to agriculture, constituting articles one, two, three, four and five of chapter thirty-three of the general laws."

Became a law May 22, 1897, with the approval of the Governor. Passed, three-fifths being present.

The People of the State of New York, represented in Senate and Assembly, do enact as follows:

Section 1. Section twenty-six of chapter three hundred and thirty-eight of the laws of eighteen hundred and ninety-three, en-

titled "An act in relation to agriculture, constituting articles one, two, three, four and five of chapter thirty-three of the general laws," is hereby amended so as to read as follows:

§ 26. Manufacture and sale of imitation butter prohibited. No person by himself, his agents or employes, shall produce or manufacture out of or from any animal fats or animal or vegetable oils not produced from unadulterated milk or cream from the same, the article known as oleomargarine or any article or product in imitation or semblance of natural butter produced from pure, unadulterated milk or cream of the same; or mix, compound with or add to milk, cream or butter any acids or other deleterious substance or any animal fats or animal or vegetable oils not produced from milk or cream, so as to produce any article or substance or any human food in imitation or in semblance of natural butter, nor sell, keep for sale or offer for sale any article, substance, or compound made, manufactured or produced in violation of the provisions of this section, whether such article, substance or compound shall be made or produced in this state or elsewhere. Any dealer in any article or product, the manufacture or sale of which is prohibited by this act, who shall keep, store or display such article or product, with other merchandise or stock in his place of business, shall be deemed to have the same in his possession for sale.

§ 2. This act shall take effect immediately.

LAWS OF 1898.

CHAPTER 110.

AN ACT to amend subdivision three of section thirty-two hundred and twenty-eight of the code of civil procedure, relating to the recovery of costs on judgments under fifty dollars.

Became a law March 21, 1898, with the approval of the Governor. Passed, three-fifths being present.

The People of the State of New York, represented in Senate and Assembly, do enact as follows:

Section 1. Subdivision three of section thirty-two hundred and twenty-eight of the code of civil procedure is hereby amended so as to read as follows:

3. An action specified in subdivision first, third, fourth or fifth of section twenty-eight hundred and sixty-three of this act. But if, in an action to recover damages for an assault, battery, false imprisonment, libel, slander, criminal conversation, seduction, or malicious prosecution; or a fine or penalty in which the people of the state are a party, the plaintiff recovers less than fifty dollars damages, the amount of his cost can not exceed the damages.

§ 2. This act shall take effect September first, eighteen hundred and ninety-eight.

CHAPTER 113.

AN ACT to amend the agricultural law, to prevent fraud in the sale of paris green.

Became a law March 23, 1898, with the approval of the Governor. Passed, three-fifths being present.

The People of the State of New York, represented in Senate and Assembly, do enact as follows:

Section 1. Chapter three hundred and thirty-eight of the laws of eighteen hundred and ninety-three, entitled "An act in relation to agriculture, constituting articles one, two, three, four, and five of chapter thirty-three of the general laws," is hereby

amended by adding a new article to be known as article eight and to read as follows:

ARTICLE VIII.

Section 110. State manufacturer and the dealer in original packages to file certificate with commissioner of agriculture.
111. Certificate to be given by commissioner of agriculture to state manufacturer and dealer in original packages.
112. Composition of paris green.
113. Paris green to be analyzed at experiment station.
114. Penalty for violations.

Section 110. State manufacturer and the dealer in original packages to file certificate with commissioner of agriculture. After the passage of this act it shall be the duty of each and every manufacturer of paris green within this state, and of every dealer in original packages of paris green manufactured outside of this state, before the said paris green is offered or exposed for sale or sold within this state, to submit to the commissioner of agriculture a written or printed statement setting forth: first, the brands of paris green to be sold, the number of pounds contained in each package in which it is put upon the market for sale, the name or names of the manufacturers and the place of manufacturing the same; second, the statement shall set forth the amount of arsenic which the said paris green contains, and the statement so furnished shall be considered as constituting a guarantee to the purchaser that every package of such paris green contains not less than the amount of arsenic set forth in the statement.

§ 111. Certificate to be given by the commissioner of agriculture to state manufacturer and dealer in original packages. Every purchaser of paris green in original packages, which is manufactured outside of this state, who intends to sell or expose the same for sale, and every manufacturer of paris green within this state shall, after filing the statement above provided for, with the commissioner of agriculture, receive from the said commissioner of agriculture, a certificate stating that he has complied with the foregoing statement, which certificate shall be furnished without any charge therefor; said certificate when furnished shall authorize the party receiving the same to deal in this state in paris green. Any person who fails to file the state-

ment aforesaid shall not be entitled to such certificate and shall not be entitled to deal in paris green within this state; nothing in this section shall be construed as applying to retail dealers.

§ 112. Composition of paris green or analogous products. Paris green, or any product analogous to it, when sold, offered or exposed for sale, as such, in this state, shall contain at least fifty per centum of arsenious oxide.

§ 113 Paris green to be analyzed at experiment station. The director of the New York state agricultural experiment station, at Geneva, shall, under the direction of the commissioner of agriculture, examine, or cause to be examined, the different brands of paris green sold, offered or exposed for sale, within the state, and cause samples of the same to be analyzed, and shall report the result of the analysis forthwith to the commissioner of agriculture.

§ 114 Penalty for violations. Any person or persons, firm, association, company or corporation violating any of the provisions of this act, shall be guilty of a misdemeanor, and shall be fined not less than fifty dollars nor more than two hundred dollars; and in addition thereto shall forfeit and pay unto the people of the state of New York the sum of one hundred dollars, together with the costs of the suit in an action caused to be brought by the commissioner of agriculture in the name of the people of the state of New York, as provided by section eight of the agricultural law.

§ 2. This act shall take effect immediately.

CHAPTER 153.

AN ACT to amend the agricultural law, in relation to receptacles for butter.

Became a law March 29, 1898, with the approval of the Governor. Passed, three-fifths being present.

The People of the State of New York, represented in Senate and Assembly, do enact as follows:

Section 1. Section thirty-two of chapter three hundred and thirty-eight of the laws of eighteen hundred and ninety-three

entitled "An act in relation to agriculture, constituting articles one, two, three, four and five of chapter thirty-three of the general laws," is hereby amended so as read as follows:

§ 32. No person, firm, association or corporation buying or receiving milk, not produced from the dairy of such person, firm, association or corporation, for the purpose of selling the same for consumption as such, or for manufacturing the same into butter, cheese, condensed milk or other human food, shall keep the same in utensils, cans, vessels, room or rooms, building or buildings, that are unclean or that have unsanitary surroundings or drainage, or in any condition whatsoever that would tend to produce or promote conditions favorable to unhealthfulness or disease. The commissioner of agriculture shall notify all persons, firms, associations or corporations violating this section, to clean said utensils, cans, vessels, room or rooms, building or buildings, or to so improve the sanitary conditions that the law will not be violated, and if such notice is complied with in ten days time, Sundays excepted, then no action shall lie for a violation of this section. The provisions of this act shall not apply to cities of the first class.

§ 2. This act shall take effect immediately.

CHAPTER 194.

AN ACT to amend chapter three hundred thirty-eight, laws of eighteen hundred ninety-three, entitled "An act in relation to agriculture, constituting articles one, two, three, four and five of chapter thirty-three of the general laws," relative to maple sugar and syrup.

Became a law March 31, 1898, with the approval of the Governor. Passed, three-fifths being present.

The People of the State of New York, represented in Senate and Assembly, do enact as follows:

Section 1. Section ninety-one of chapter three hundred thirty-eight, laws of eighteen hundred ninety-three, is hereby amended so as to read as follows:

§ 91. (1) No person shall manufacture for sale, keep for sale, or offer or expose for sale, any sugar in imitation or semblance of maple sugar which is not pure maple sugar, nor any syrup in imitation or semblance of maple syrup, which is not pure maple syrup, nor shall any person manufacture, offer or expose for sale any sugar as and for maple sugar which is not pure maple sugar, nor any syrup as and for maple syrup which is not pure maple syrup.

(2) For the purpose of this act the term "maple sugar" shall be deemed to mean sugar made from pure maple sap or pure maple syrup, and the term "maple syrup" shall be deemed to mean syrup made from pure maple sap.

§ 2. The following section is hereby added to chapter three hundred thirty-eight, laws of eighteen hundred ninety-three, and shall be known as section ninety-two.

§ 92. No person shall manufacture, sell or expose for sale, any compound or mixture as and for sugar which shall be made up of maple sugar mixed with any other sugar or any other substance without branding or labeling the said sugar with a statement giving the ingredients of which it is made up. No person shall manufacture, sell, expose for sale, or offer for sale any compound or mixture as syrup which shall be made up of maple syrup mixed with any other syrup or ingredient without branding or labeling said syrup with a statement giving the ingredients of which it is made up. This shall not be construed to apply to a syrup or syrups manufactured and sold for medicinal purposes only.

§ 3. This act shall take effect immediately.

CHAPTER 412.

AN ACT to prevent the adulteration of and deception in the sale of linseed or flaxseed oil.

Became a law April 22, 1898, with the approval of the Governor. Passed, a majority being present.

The People of the State of New York, represented in Senate and Assembly, do enact as follows:

Section 1. No person, firm or corporation shall manufacture or mix for sale, sell, or offer for sale, under the name of raw linseed oil, any article which is not wholly the product of commercially pure linseed or flaxseed. Nor shall any person, firm or corporation manufacture or mix for sale, sell, or offer for sale, under the name of boiled linseed oil, any article, unless the oil from which said article is made be wholly the product of commercially pure linseed or flaxseed, and unless the same has been heated to at least two hundred and twenty-five degrees Fahrenheit.

2. Nothing in this act shall be construed as prohibiting the sale or manufacture of any compound of linseed or flaxseed oil; provided, that such compound, if it imitates in appearance and is designed to take the place of linseed or flaxseed oil, shall not be manufactured or mixed for sale, sold or offered for sale, under a name or description containing the words "linseed oil" or "flaxseed oil."

3. Any person, firm or corporation who shall violate any of the provisions of this act, shall be deemed guilty of a misdemeanor, and upon conviction thereof shall be punished, for each and every such violation, with a fine of not less than fifty dollars nor more than five hundred dollars; and in default of the payment of such fine shall be committed to the county jail for a period of not less than thirty days.

4. It shall be the duty of the commissioner of agriculture to enforce the provisions of this act. The said commissioner and his assistants, experts and chemists, and other appointed by him, shall have access, ingress and egress to and from all places of

business and buildings where linseed or flaxseed oil is kept for sale or stored. They shall also have the power and authority to open any tank, barrel, can or other vessel containing such oil, and may inspect the contents thereof, and take samples therefrom for analysis.

5. Any person, firm or corporation who shall violate any of the provisions of this act shall, in addition to the fines herein previously described, for each offense forfeit and pay a fixed penalty of one hundred dollars. Such penalty shall be recovered, with costs, in any court of the state having jurisdiction thereof, in an action to be prosecuted in the name of the people, by the commissioner of agriculture, or any of his assistants, and shall be devoted to the payment of the expenses of the department of said commissioner. In any action commenced in the supreme court for the recovery of such penalties, an application may be made on the part of the plaintiff to said court or any justice thereof for an injunction to restrain the defendant, his agents, servants and employes, from the further violation of this act during the pendency of the action, and it shall be the duty of such court or justice to grant the injunction, in the same manner as injunctions are usually granted under the rules and practice of such court, upon proof by affidavits that the defendant has been guilty of such violation, either before or after the commencement of the action. In case the plaintiff shall recover judgment for the penalty or penalties demanded in the complaint, the judgment shall contain a permanent injunction, restraining the defendant, his agents, servants and employes, from any further violation of the section or sections on which the recovery is obtained.

6. This act shall take effect immediately.

CHAPTER 482.

AN ACT to amend section eighty-two, section eighty-three as amended by chapter one hundred thirty-four of the laws of eighteen hundred ninety-five, and to repeal section eighty-four of chapter three hundred and thirty-eight of the laws of eighteen hundred ninety-three, entitled "An act in relation to agriculture, constituting articles one, two, three, four, five, six and seven of chapter thirty-three of the general laws," relative to the prevention of disease in fruit trees and the pests that infect the same.

Became a law April 22, 1898, with the approval of the Governor. Passed, three-fifths being present.

The People of the State of New York, represented in Senate and Assembly, do enact as follows:

Section 1. Section eighty-two of chapter three hundred and thirty-eight of the laws of eighteen hundred and ninety-three is hereby amended so as to read as follows:

§ 82. The prevention of disease in fruit trees and the extirpation of insect pests that infect the same. No person shall knowingly or willfully keep any peach, almond, apricot, or nectarine tree affected with the contagious disease known as yellows. Nor shall any person knowingly or willfully keep any plum, cherry or other trees infected with the contagious disease or fungus, known as black knot, nor any tree, shrub or plant infested with or by the San José scale or other insect pest dangerously injurious to or destructive of the trees, shrub or other plant. Every such tree, shrub and plant shall be a public nuisance, and no damage shall be awarded for entering upon premises and destroying such trees if infected with yellows or infested with San José scale or for cutting away the diseased part of any tree affected with black knot or altogether destroying such tree if necessary to suppress such disease, if done in accordance with the provisions of this article, except as otherwise herein provided. Every person when he becomes aware of the existence of such disease or insect pest in any tree owned by him shall forthwith report the same to the commissioner of agriculture at Albany, New York,

requesting said commissioner to take such action as the law provides.

§ 2. Section eighty-three of said chapter three hundred and thirty-eight of the laws of eighteen hundred and ninety-three, as amended by chapter one hundred and thirty-four of the laws of eighteen hundred and ninety-five, are hereby amended so as to read as follows:

§ 83. Appointment and duties of the agent of the commissioner of agriculture. When the commissioner of agriculture knows or has reason to believe that any such contagious disease exists, or that there is good reason to believe that it exists, or danger is justly apprehended of its introduction in any town or city in the state, or that any injurious insect pest exists within this state, and has reason to believe that danger may be justly apprehended from its existence, he shall forthwith send some competent person and such agent or agents as he may deem necessary to assist in extirpating said pest or pests, disease or diseases, and the said commissioner of agriculture is hereby authorized and empowered to take such steps and do whatever may be deemed necessary to so control or prevent the spread or extirpate said pest or pests, disease or diseases, and he shall, unless previously inspected by a federal officer the same year, cause an examination to be made at least once each year prior to September first of each and every nursery or other place where trees, shrubs or plants, commonly known as nursery stock, are grown for sale for the purpose of ascertaining whether the trees, shrubs or plants therein kept or propagated for sale are infected with any such contagious disease or diseases, or infested with such pest or pests. If after such examination it is found that the said trees, shrubs or other plants so examined are free in all respects from any such contagious or infectious disease, or diseases, dangerously injurious, pest or pests, the said commissioner, or his duly authorized agent or other person designated to make such examination shall thereupon issue to the owner or proprietor of the said stock thus examined a certificate setting forth the fact of the examination and that the stock so examined is apparently free from any and all such disease or diseases, pest or pests.

Should any nurseryman, agent, dealer or broker send out or deliver within the state, trees, vines, shrubs, plants, buds or cuttings, commonly known as nursery stock, and which are subject to the attacks of the insects and diseases above provided for, unless he has in his possession a copy of said certificate; dated within a year thereof; deface or destroy said certificate; or wrongfully be in possession of said certificate, he shall be guilty of a misdemeanor. All nursery stock shipped by freight, express or other transportation companies, shall be accompanied by a copy of said certificate attached to each car, box, bale or package. Any person shipping nursery stock as above, without such certificate attached shall be guilty of a misdemeanor. A certificate issued by an official of the United States, setting forth the fact that the nursery stock is free from any and all such disease or diseases, pest or pests, shall be accepted in lieu of state inspection. If in the judgment of the said commissioner of agriculture or the person or persons representing him, the trees, shrubs or other plants should be entirely destroyed, then such destruction shall be carried on and completed under the supervision of the commissioner of agriculture, or the person or persons duly appointed by him, without unnecessary delay, but the owner of the trees shall be notified immediately, upon its being determined that they must be destroyed, by a written notice signed by such commissioner, or the person representing him and left at his usual place of residence, or if not a resident of the town by leaving the notice with the person in charge of the premises, trees or fruit or in whose possession they may be. Such notice shall contain a brief statement of the facts found to exist, whereby it is deemed necessary to destroy said trees, shrubs or other plants, and shall call attention to the law under which it is proposed to destroy them. In case of objection to the findings of the inspector or agent of the commissioner of agriculture, an appeal shall be made to said commissioner, whose decision shall be final; an appeal must be taken within three days from service of said notice, and shall act as a stay of proceedings until it is heard and decided. When the commissioner of agriculture or the person or persons appointed by him shall be determined that any tree or trees, shrubs or other

plants must be treated or destroyed, forthwith he may employ all necessary assistants for that purpose, and such person or persons, agent or agents, employee or employees may enter any or all premises in any town or city necessary for the purpose of such treatment, removal or destruction.

§ 3. Section eighty-four of said chapter three hundred and thirty-eight of the laws of eighteen hundred and ninety-three is hereby repealed.

§ 4. The provisions of this act shall not apply to florists' green house plants, flowers and cuttings, commonly known as greenhouse stock.

§ 5. This act shall take effect June first, eighteen hundred and ninety-eight.

CHAPTER 491.

AN ACT to amend chapter three hundred and thirty-eight, laws of eighteen hundred and ninety-three, entitled "An act in relation to agriculture, constituting articles one, two, three, four and five, of chapter thirty-three of the general laws," in relation to sale and transportation of calves.

Became a law April 22, 1898, with the approval of the Governor. Passed, three-fifths being present.

The People of the State of New York, represented in Senate and Assembly, do enact as follows:

Section 1. Chapter three hundred and thirty-eight, laws of eighteen hundred and ninety-three, entitled "An act in relation to agriculture, constituting articles one, two, three, four, five, six and seven of chapter thirty-three of the general laws," is hereby amended by adding the following sections, to be known as section seventy-one, seventy-two and seventy-three.

§ 71. No person shall slaughter, for the purpose of selling the same for food, or expose for sale or sell within this state, or bring

or cause to be brought into any city, town or village within this state for food any calf or carcass of the same, or any part thereof except the hide, unless it is in good, healthy condition and was at least four weeks of age at the time of killing. Any person or persons duly authorized by the commissioner of agriculture, may examine any calf or veal found within this state offered or exposed for sale, or kept with intent to sell as food, and if such calf is under four weeks of age, or the veal is from a calf killed under four weeks of age, or from a calf in an unhealthy condition when so killed, he may seize the same and cause it to be destroyed or disposed of in such manner as to make it impossible to be thereafter used as food.

§ 72. On and after the passage of this act it shall be unlawful for any corporation, partnership, person or persons to ship to or from any part of this state any carcass or carcasses of a calf or calves or any part of such carcass except the hide, unless they shall attach to every carcass or part thereof so shipped in a conspicuous place a tag, that shall stay thereon during such transportation, stating the name or names of the person or persons who raised the calf, the name of the shipper, the points of shipping and the destination and the age of the calf.

§ 73. On and after the passage of this act, no railroad company, express company, steamboat company, or other common carrier, shall carry or receive for transportation any carcass or carcasses of calves, or any part of the same except the hide, unless the said carcass or carcasses or parts thereof shall be tagged as herein provided.

§ 2. This act shall take effect immediately.

CHAPTER 494.

AN ACT to amend chapter three hundred and thirty-eight of the laws of eighteen hundred and ninety-three, entitled "An act in relation to agriculture, constituting articles one, two, three, four and five, of chapter thirty-three of the general laws," relative to distribution of moneys to agricultural societies.

Became a law April 22, 1898, with the approval of the Governor. Passed, three-fifths being present.

The People of the State of New York, represented in Senate and Assembly, do enact as follows:

Section 1. Section eighty-eight of chapter three hundred and thirty-eight of the laws of eighteen hundred and ninety-three, as amended by chapter five hundred and eighty-nine, of the laws of eighteen hundred and ninety-seven, is hereby amended so as to read as follows:

(*Amended by chapters* 87 *and* 339 *of the Laws of* 1900.)

§ 88. Receipts and apportionment of moneys for the promotion of agriculture. Of all moneys appropriated for the promotion of agriculture in any one year, twenty thousand dollars thereof shall be distributed in premiums by the New York State Agricultural Society; two thousand dollars thereof shall be paid to each of the agricultural societies, agricultural clubs, or agricultural expositions which shall have held annual agricultural fairs or meetings during each of the three years next preceding such appropriation, and which shall have paid at each of such annual fairs or meetings during such three years the sum of three thousand dollars as premiums for agricultural interests, exclusive of the premiums paid for trials or tests of speed, skill or endurance by man or beast, under the conditions and in the manner provided by section eighty-nine of this chapter. Seventy per centum of the balance of the amount so appropriated shall be apportioned and distributed among the various county agricultural societies and the American Institute in The City of New York; and thirty per centum thereof among the various towns and other agricultural societies, agricultural clubs or agricultural expositions entitled by this section to receive thirty per centum of the moneys received by the comp-

troller from the tax collected from the racing associations, corporations or clubs of the state. Such apportionment and distribution shall be made by the commissioner of agriculture in the following manner: One-half of the seventy per centum to be apportioned to such county agricultural societies and the American Institute in The City of New York shall be apportioned and distributed equally and the remainder in proportion to the actual premiums paid during the previous year by such societies and institute, exclusive of premiums paid for trials or tests of speed, skill or endurance of man or beast. If there is no county agricultural society in any county, or if the county agricultural society is not in active operation as such, then the town society or societies in such county, or other agricultural societies in such county, except the New York State Agricultural Society, that would otherwise be entitled to share under the thirty per centum distribution referred to in this section, shall share jointly in the distribution of such money on the same basis as they would if they were a county agricultural society, provided such societies sustain a public fair with premium list, which premium list and reports of such societies shall be forwarded and made to the commissioner of agriculture. Of the thirty per centum to be distributed among the various town and other agricultural societies, clubs or expositions one-third thereof shall be apportioned and distributed equally and the remainder in proportion to the premiums awarded and paid by said society, club or exposition for exhibits made at the annual fair upon the awards or premiums of which they seek a portion of the money to be distributed, exclusive of premiums paid for trials or tests of speed, skill or endurance of man or beast. No proportion of such amount shall be paid to any such society, club or exposition in which the actual amount paid by it as such premiums in the year preceding such apportionment, is less than five hundred dollars. All revenues which have been or shall be received by the comptroller, and not distributed as heretofore provided, and all moneys received by him from the tax collected from racing associations pursuant to chapter one hundred and ninety-seven of the laws of eighteen hundred and ninety-four, and chapter five hundred and seventy of the laws of eighteen hundred and ninety-five,

and all acts amendatory thereto, or hereafter otherwise collected from racing associations, corporations or clubs, shall constitute a fund, which shall be annually disbursed on behalf of the state for prizes for improving the breed of cattle, sheep and horses at the various fairs throughout the state as hereinafter prescribed. Thirty per centum of the funds so collected shall be disbursed by the commissioner of agriculture among the agricultural societies, agricultural clubs or agricultural expositions of the state, which had not, previous to May twenty-ninth, eighteen hundred and ninety-five, received appropriations from the state, other than appropriations that they received from the fund to be distributed to county societies from the fact that there was no county society in existence or in active operation within that county, as follows: One-third shall be apportioned and distributed equally and the remainder in proportion to the premiums awarded and paid by said society, club or exposition for exhibits made at the annual fairs upon the awards or premiums of which they seek a portion of the money to be distributed, such sums shall only be paid to such societies which have received appropriations from the state previous to the passage of this act, and are now duly organized under the laws of the state of New York, and in active operation in counties having a population according to the census of eighteen hundred and ninety-two of over three hundred and twenty-five thousand inhabitants, or which shall have held fairs, annually, during each of the three years prior to May twenty-ninth, eighteen hundred and ninety-five, and which shall have paid, at their annual meetings or fairs during such three years, not less that one thousand dollars in the aggregate as premiums for agriculture, mechanical, and domestic products, exclusive of the premiums paid for trials or tests of speed, skill or endurance of man or beast, and which shall have filed their report with the commissioner of agriculture, on or before July first, eighteen hundred and ninety-five, as heretofore provided in chapter eight hundred and twenty of the laws of eighteen hundred and ninety-five. Seventy per centum of such funds shall be disbursed by the commissioner of agriculture among the various county agricultural societies throughout the state, and the American Institute, in The City of

New York, as follows: One-half shall be apportioned and distributed equally, and the remainder in proportion to the premiums awarded and paid by said society, club or exposition, for exhibits made at the annual fair upon the awards or premiums of which they seek a portion of the money to be distributed, exclusive of premiums paid for trials or tests of speed, skill or endurance of man or beast. If there is no county agricultural society in any county, or if the county agricultural society is not in active operation as such, then the town society or societies in such county, or other agricultural societies in such county, except the New York State Agricultural Society, that would otherwise be entitled to share under the thirty per centum distribution referred to in this section, shall share jointly in the distribution of such money on the same basis as they would if they were a county agricultural society, provided such societies sustain a public fair, with premium list and reports of such societies shall be forwarded and made to the commissioner of agriculture. All agricultural societies, agricultural clubs or agricultural expositions entitled to receive any portion of the moneys appropriated by the state must hereafter, on or before the fifteenth day of December in each year, file a statement, duly verified by the secretary and treasurer, showing the amount of premiums paid at the last annual fair, exclusive of premiums paid for trials or tests of speed, skill or endurance of man or beast, which statement shall be filed in the office of the commissioner of agriculture, otherwise such society, club or exposition shall forfeit its right to participate in the distribution of such moneys for premiums paid for such year. No proportion of such moneys shall be paid to any such society, club or exposition in which the actual amount paid by it as such premiums in the year preceding such apportionment, is less than five hundred dollars. Any town or other agricultural society in a county in which there is no county agricultural society in active operation and which, according to the terms of this section receives any portion of the seventy per centum of such funds apportioned to county agricultural societies, shall not receive any portion of the thirty per centum of such funds. Any such society, club or exposition, receiving the sum of

two thousand dollars under the provisions of section eighty-nine of this act, shall not receive any other portion of the money appropriated for the promotion of agriculture. Any such agricultural society, agricultural club, agricultural exposition, or agricultural fair association, organized under the laws of the state of New York, which shall fail or neglect to hold annual fairs and file their annual reports as provided by this law, with the commissioner of agriculture for two consecutive years, shall forfeit all of their chartered rights, including any privileges or moneys they might thereafter otherwise be entitled to under this act.

§ 2. This act shall take effect immediately.

CHAPTER 557.

AN ACT to amend the agricultural law, relative to the inspection of dairy products.

Became a law April 26, 1898, with the approval of the Governor. Passed, three-fifths being present.

The People of the State of New York, represented in Senate and Assembly, do enact as follows:

Section 1. Section twelve of article one of chapter three hundred and thirty-eight of the laws of eighteen hundred and ninety-three, entitled "An act in relation to agriculture, constituting articles one, two, three, four and five of chapter thirty-three of the general laws," and known as the agricultural law, is hereby amended to read as follows:

§ 12. Inspection, how conducted. When the commissioner of agriculture, an assistant commissioner, or any person or officer authorized by the commissioner, or by this chapter, to examine or inspect any product manufactured or offered for sale shall in discharge of his duties take samples of such product, he shall before taking a sample, request the person delivering the milk or who has charge of it at the time of inspection, to thoroughly stir or mix the said milk before the sample is taken. If the person so in charge refuses to stir or mix the milk as requested, then the person so requesting shall himself so stir and mix the

milk before taking the sample, and the defendant shall thereafter be precluded from introducing evidence to show that the milk so taken was not a fair sample of the milk delivered, sold, offered or exposed for sale by him. The person taking the sample of milk for analysis shall take duplicate samples thereof in the presence of at least one witness, and he shall in the presence of such witness seal both of such samples, and shall tender, and, if accepted, deliver at the time of taking one sample to the manufacturer or vendor of such product, or to the person having custody of the same, with a statement in writing of the cause of the taking of the sample. In taking samples of milk for analysis at a creamery, factory, platform or other place where the same is delivered by the producer for manufacture, sale or shipment, or from a milk vendor who produces the milk which he sells, with a view of prosecuting the producer of such milk for delivering, selling or offering for sale adulterated milk, the said commissioner of agriculture or assistant, or his agent or agents, shall within ten days thereafter, with the consent of the said producer, take a sample in a like manner of the mixed milk of the herd of cows from which the milk first sampled was drawn and shall deliver the duplicate sample to the said producer and shall cause the sample taken by himself or his agent to be analyzed. If the sample of milk last taken by the commissioner of agriculture or his agent or agents shall upon analysis prove to contain no higher percentage of milk solids, or no higher percentage of fat than as the sample taken at the creamery, factory, platform or other place, then no action shall lie against the said producer for violation of subdivisions one, two, three, seven and eight of section twenty of the agricultural law. In taking a second sample as above set forth from the mixed milk of the herd, it shall be the duty of the commissioner of agriculture to have an assistant, agent or agents present during the entire time in which the said cattle are being milked to observe closely so as to be sure that the milk thus to be sampled is not adulterated and to see that it is thoroughly mixed so that the sample taken shall be a fair sample of the average quality of the mixed milk of the entire dairy or herd of

cows of said producer. If, however, the said producer refuses to allow such examination of the milk produced by his dairy then he shall be precluded from offering any evidence whatever tending to show that the milk delivered by him at the said creamery, factory, platform or other place was just as it came from the cow. If the said producer does permit such examination the commissioner of agriculture shall, upon receiving application therefor, send to said producer a copy of the analysis of each of the samples of milk so taken and analyzed as above provided.

§ 2. This act shall take effect immediately.

CHAPTER 558.

AN ACT to amend the agricultural law, in relation to penalties.

Became a law April 26, 1898, with the approval of the Governor. Passed, three-fifths being present.

The People of the State of New York, represented in Senate and Assembly, do enact as follows:

Section 1. Section thirty-seven of chapter three hundred and thirty-eight of the laws of eighteen hundred and ninety-three, entitled "An act in relation to agriculture, constituting articles one, two, three, four and five of chapter thirty-three of the general laws," as amended by chapter five hundred and fifty-four of the laws of eighteen hundred and ninety-seven, is hereby amended to read as follows:

(*Amended by chapter* 435 *of the Laws of* 1899, *and chapters* 76 *and* 559 *of the Laws of* 1900.)

§ 37. Penalties. Every person violating any of the provisions of article two and three shall forfeit to the people of the state of New York a sum not less than twenty-five dollars nor more than one hundred dollars for every such violation. When such violation consists of the manufacture or production of any prohibited article, each day during which or any part of which such manufacture or production is carried on or continued, shall be deemed a separate violation of the provisions of this article. When the violation consists of the sale, or the offering or expos-

ing for sale or exchange of any prohibited article or substance, the sale of each one of several packages shall constitute a separate violation, and each day on which any such article or substance is offered or exposed for sale or exchange, shall constitute a separate violation of this article. When the use of any such article or substance is prohibited, each day during which or any part of which said article or substance is so used or furnished for use, shall constitute a separate violation, and the furnishing of the same for use to each person to whom the same may be furnished shall constitute a separate violation. Whoever by himself or another violates any of the provisions of articles two and three of said chapter, shall be guilty of a misdemeanor, and upon conviction shall be punished by a fine of not less than twenty-five dollars, nor more than two hundred dollars, or by imprisonment of not less than one month nor more than six months or by both such fine and imprisonment, for the first offense; and by six months' imprisonment for the second offense.

§ 2. This act shall take effect immediately.

CHAPTER 559.

AN ACT to amend chapter three hundred and thirty-eight of the laws of eighteen hundred and ninety-three, entitled "An act in relation to agriculture, constituting articles one, two, three, four and five of chapter thirty-three of the general laws," relative to branding cheese.

Became a law April 26, 1898, with the approval of the Governor. Passed, three-fifths being present.

The People of the State of New York, represented in Senate and Assembly, do enact as follows:

Section 1. Section thirty-three of chapter three hundred thirty-eight, of the laws of eighteen hundred ninety-three, is hereby amended so as to read as follows:

§ 33. Manufacturer's brand of cheese. Every manufacturer of full-milk cheese may put a brand upon each cheese indicating "full-milk cheese," and the date of the month and year when made; and no person shall use such a brand upon any cheese

made from milk from which any of the cream has been taken. The commissioner of agriculture shall procure and issue to the cheese manufacturers of the state, on proper application therefor, and under such regulations as to the custody and use thereof as he may prescribe, a uniform stencil brand, bearing a suitable device or motto, and the words, "New York state full-cream cheese." Every such brand shall be used upon the outside of the cheese and shall bear a different number for each separate factory. The commissioner shall keep a book, in which shall be registered the name, location and number of each manufactory using the brand, and the name or names of the persons at each manufactory authorized to use the same. No such brand shall be used upon any other than full-cream cheese or packages containing the same.

§ 2. This act shall take effect immediately.

LAWS OF 1899.

CHAPTER 13.

AN ACT making an appropriation to continue the promotion of sugar beet culture, in accordance with the provisions of chapter five hundred of the laws of eighteen hundred and ninety-seven.

Became a law February 23, 1899, with the approval of the Governor. Passed, three-fifths being present.

The People of the State of New York, represented in Senate and Assembly, do enact as follows:

Section 1. The sum of thirty thousand dollars, or so much thereof as may be necessary, is hereby appropriated out of any moneys in the treasury not otherwise appropriated, to be paid in the manner prescribed by chapter five hundred of the laws of eighteen hundred and ninety-seven. Of such amount the commissioner of agriculture may expend such sum or sums as he may deem necessary or expedient, not exceeding the sum of two thousand five hundred dollars in promoting, by instruction or otherwise, and encouraging the proper and economic cultivation of sugar beets. This appropriation is made by the legislature in continuation of the policy adopted at the session of eighteen hundred ninety-seven in the faith and with the declared purpose of making direct appropriations from the state for a successive period of not less than five years from said first appropriation, in aid of the permanent establishment of the beet sugar industry in this state.

§ 2. This act shall take effect immediately.

CHAPTER 101.

AN ACT to amend the agricultural law, relative to the weighing of sugar beets.

Became a law March 17, 1899, with the approval of the Governor. Passed, three-fifths being present.

The People of the State of New York, represented in Senate and Assembly, do enact as follows:

Section 1. Section seventy-five of the agricultural law, as amended by chapter five hundred of the laws of eighteen hundred and ninety-seven, is hereby amended to read as follows:

§ 75. **Weighman, powers and duties.** It shall be the duty of the commissioner of agriculture to appoint at each sugar manufactory in this state where the output of such manufactory shall exceed two thousand pounds of sugar per day, a person who shall weigh all beets received by the person or persons, corporation or association operating said manufactory. Such person shall be known as the weighman, and he shall keep accurate record of all duties performed by him. He shall discharge all duties pertaining to his position in an impartial manner, and shall furnish the commissioner of agriculture with a good and sufficient bond in the sum of two thousand dollars for the faithful discharge of his duties as prescribed by this act. The commissioner of agriculture may appoint such person or persons to assist said weighman as the service to be performed may require. Each person so appointed shall give bond as provided by this section. The weighman shall take into his possession, promptly on receipt of beets at such manufactory, such samples of beets as he deems fair and equitable, from which to remove dirt or other dockage. He shall then promptly weigh all beets from which samples have been taken and keep an accurate record of all weights, and all of such records shall show the names of both the seller and the buyer. The weights furnished by said weighman shall be accepted by both the seller and the buyer, and upon such weight so furnished settlement between the seller and the buyer shall be made. The compensation or fee allowed such weighman shall not exceed the sum of five dollars per day for time actually employed and for his assistants a sum not to exceed three dollars per day for the time actually employed. All expenses arising from the duties of said weighman or his assistants, as prescribed by this act, shall be paid by the person or persons, corporation or association oper-

ating such manufactory where such expense is incurred. The foregoing provisions of this section as to weighing shall not apply to such beets as are weighed by agreement of the buyer and seller at the station of shipment, but the weighing in such cases shall be done by persons appointed by the commissioner of agriculture and the expense of such weighing shall be borne as provided in this act.

§ 2. This act shall take effect immediately.

CHAPTER 149.

AN ACT to amend the agricultural law, in relation to process butter and the use of preservatives in dairy products.

Became a law March 27, 1899, with the approval of the Governor. Passed, a majority being present.

The People of the State of New York, represented in Senate and Assembly, do enact as follows:

Section 1. Section twenty-seven of chapter three hundred and thirty-eight of the laws of eighteen hundred and ninety-three, entitled "An act in relation to agriculture, constituting articles one, two, three, four and five of chapter thirty-three of the general laws," is hereby amended so as to read as follows:

(*Amended by chapter* 534 *of the Laws of* 1900.)

§ 27. **Manufacture or mixing of animal fats with milk, cream or butter prohibited.** No person shall manufacture, mix or compound with or add to natural milk, cream or butter any animal fats or animal or vegetable oils, nor make or manufacture any oleaginous substance not produced from milk or cream, with intent to sell the same as butter or cheese made from unadulterated milk or cream or have the same in his possession with such intent; nor shall any person solicit or take orders for the same or offer the same for sale, nor shall any such article or substance or compound so made or produced, be sold as and for butter or cheese, the product of the dairy. No person shall coat, powder or color with annatto or any coloring matter whatever, butterine or oleomargarine or any compound of the same or any product or manufacture made in whole or in part from animal fats or animal or vegetable oils not produced from unadulterated milk or cream by

means of which such product, manufacture or compound shall resemble butter or cheese, the product of the dairy; nor shall he have the same in his possession with intent to sell the same nor shall he sell or offer to sell the same. No person by himself, his agents or employes, shall manufacture, sell, offer or expose for sale, butter that is produced by taking original packing stock or other butter or both and melting the same, so that the butter fat can be drawn off, then mixing the said butter fat with skimmed milk or milk or cream or other milk product and rechurning the said mixture, or that is produced by any similar process and is commonly known as boiled or process butter, unless he shall plainly brand or mark the package or tub or wrapper in which the same is put up in a conspicuous place with the words "renovated butter." If the same shall be put up, sold, offered or exposed for sale in prints or rolls, then the said prints or rolls shall be labeled plainly with printed letters in a conspicuous place on the wrapper with the words "renovated butter." If the same is packed in tubs or boxes or pails or other kind of a case or package the words "renovated butter" shall be printed on the top and side of the same in letters, at least, one inch in length, so as to be plainly seen by the purchaser. If such butter is exposed for sale, uncovered, not in a package or case, a placard containing the label so printed shall be attached to the mass of butter in such manner as to easily be seen and read by the purchaser. No person shall sell, offer or expose for sale, any butter or other dairy product containing a preservative, but this shall not be construed to prohibit the use of salt in butter or cheese, or spirituous liquors in club or other fancy cheese or sugar in condensed milk.

§ 2. This act shall take effect immediately.

CHAPTER 223

AN ACT to amend chapter three hundred and thirty-eight of the laws of eighteen hundred and ninety-three, entitled "An act in relation to agriculture, constituting articles one, two, three, four, five, six, seven and eight of the general laws," relative to prevention of diseases among bees.

Became a law April 3, 1899, with the approval of the Governor. Passed, three-fifths being present.

The People of the State of New York, represented in Senate and Assembly, do enact as follows:

Section 1. Section eighty of chapter three hundred and thirty-eight of the laws of eighteen hundred and ninety-three, is hereby amended so as to read as follows:

§ 80. **The prevention of diseases among bees.** No person shall keep in his apiary any colony of bees affected with a contagious malady known as foul brood and every bee-keeper, when he becomes aware of the existence of such disease among his bees, shall immediately notify the commissioner of agriculture of the existence of such disease.

§ 2. Section eighty-one of said act is hereby amended so as to read as follows:

§ 81. **Duties of the commissioner.** The commissioner of agriculture shall immediately upon receiving notice of the existence of foul brood among bees in any locality, send some competent person or persons to examine the apiary or apiaries reported to him as being affected, and all the other apiaries in the immediate locality of the apiary or apiaries so reported; if foul brood is found to exist in them, the person or persons so sent by the commissioner of agriculture shall give the owners or caretakers of the diseased apiary or apiaries full instructions how to treat said cases. The commissioner of agriculture shall cause said apiary or apiaries to be visited from time to time as he may deem best and if, after proper treatment, the said bees shall not be cured of the disease known as foul brood, then he may cause the same to be destroyed in such manner as may be necessary to prevent the spread of the said disease. For the purpose of enforcing this act, the commissioner of agriculture, his agents, employes, appointees or counsel, shall have access, ingress and egress to all places where bees or honey or appliances used in apiaries may be, which it is believed are in any way affected with the said disease

of foul brood. No owner or caretaker of a diseased apiary, honey or appliances shall sell, barter or give away any bees, honey or appliances from said diseased apiary, or expose other bees to the danger of said disease, nor refuse to allow the said commissioner of agriculture, or the person or persons appointed by him to inspect said apiary, honey or appliances, and do such things as the said commissioner of agriculture or the person or persons appointed by him shall deem necessary for the eradication of said disease of foul brood. Any person who disregards or violates any of the provisions of this section is guilty of a misdemeanor, and shall be punished by a fine of not less than thirty dollars nor more than one hundred dollars, or by imprisonment in the county jail for not less than one month nor more than two months, or by both fine and imprisonment.

§ 3. This act shall take effect immediately.

CHAPTER 303.

AN ACT to amend the agricultural law relative to the promotion of sugar beet culture.

Became a law April 13, 1899, with the approval of the Governor. Passed, three-fifths being present.

The People of the State of New York, represented in Senate and Assembly, do enact as follows:

Section 1. Section seventy-two of chapter three hundred and thirty-eight of the laws of eighteen hundred and ninety-three, entitled "An act in relation to agriculture, constituting articles one, two, three, four and five of chapter thirty-three of the general laws," as added thereto by chapter five hundred of the laws of eighteen hundred and ninety-seven, is hereby amended so as to read as follows:

§ 72. Persons, et cetera, to whom moneys may be distributed. Any person, firm, association or corporation, engaged in the manufacture of sugar from beets grown in the state of New York, upon registration in the office of the commissioner of agriculture, and filing a certificate therein, stating the name of such person, firm, association or corporation, the location of the factory, and the capacity thereof, and the time when the manufacture of sugar began or is to begin, shall be entitled to a distributive share of

the amount appropriated for the promotion and encouragement of sugar beet culture, as provided in this article. No such person, firm, association or corporation shall receive any portion of the moneys so appropriated, unless all the beets used in the manufacture of such sugar are grown within the state of New York, and unless the grower received therefor a net sum of not less than five dollars per ton, to be delivered at such point as may be agreed upon by the grower and the manufacturer, and provided such beets are not grown by the manufacturer of such sugar. No money shall be distributed to such manufacturers, unless the sugar manufactured by them shall contain at least ninety per centum of crystallized sugar. The commissioner of agriculture may expend such sum or sums as he may deem necessary or expedient, not exceeding ten per centum of the amount appropriated for the purposes of this article, in practical and scientific experiments in growing sugar beets in one or more sections of this state, for the purpose of determining the adaptability of the soil thereof for the production of sugar beets.

§ 2. This act shall take effect immediately, and shall apply to all moneys appropriated by the provisions of chapter one hundred and ninety-one of the laws of eighteen hundred and ninety-eight and not heretofore distributed.

CHAPTER 435.

AN ACT to amend chapter three hundred and thirty-eight of the laws of eighteen hundred and ninety-three, entitled "An act in relation to agriculture, constituting articles one, two, three, four and five, constituting chapter thirty-three of the general laws," relative to penalties.

Became a law April 25, 1899, with the approval of the Governor. Passed, a majority being present.

The People of the State of New York, represented in Senate and Assembly, do enact as follows:

Section 1. Section thirty-seven of chapter three hundred and thirty-eight of the laws of eighteen hundred and ninety-three, as amended by chapter five hundred and fifty-four of the laws of eighteen hundred and ninety-seven, as amended by chapter five

hundred and fifty-eight of the laws of eighteen hundred and ninety-eight, is hereby amended so as to read as follows:

(*Amended by chapters* 76 *and* 559 *of the Laws of* 1900.)

§ 37. **Penalties.** Every person violating any of the provisions of articles two and three and sections ninety-one and ninety-two of the agricultural law and chapter four hundred and ninety-one of the laws of eighteen hundred and ninety-eight, shall forfeit to the people of the state of New York a sum not less than twenty-five dollars nor more than one hundred dollars for every such violation. When such violation consists of the manufacture or production of any prohibited article, each day during which or any part of which such manufacture or production is carried on or continued, shall be deemed a separate violation of the provisions of this article. When the violation consists of the sale, or the offering or exposing for sale or exchange of any prohibited article or substance, the sale of each one of several packages shall constitute a separate violation, and each day on which any such article or substance is offered or exposed for sale or exchange, shall constitute a separate violation of this article. When the use of any such article or substance is prohibited, each day during which or any part of which said article or substance is so used or furnished for use, shall constitute a separate violation, and the furnishing of the same for use to each person to whom the same may be furnished shall constitute a separate violation. Whoever by himself or another violates any of the provisions of articles two and three and sections ninety-one and ninety-two of the agricultural law shall be guilty of a misdemeanor, and upon conviction shall be punished by a fine of not less than twenty-five dollars, nor more than two hundred dollars, or by imprisonment of not less than one month nor more than six months or by both such fine and imprisonment, for the first offense; and by six months' imprisonment for the second offense.

§ 2. This act shall take effect immediately.

CHAPTER 510.

AN ACT to amend the agricultural law, regulating the sale and analysis of concentrated feeding stuffs.

Became a law May 3, 1899, with the approval of the Governor. Passed, three-fifths being present.

The People of the State of New York, represented in Senate and Assembly, do enact as follows:

Section 1. Chapter three hundred and thirty-eight of the laws of eighteen hundred and ninety-three, entitled "An act in relation to agriculture, constituting articles one, two, three, four and five of chapter thirty-three of the general laws," is hereby amended by adding at the end thereof a new article to be known as article nine, and to read as follows:

ARTICLE IX.

SALE AND ANALYSIS OF CONCENTRATED COMMERCIAL FEEDING STUFFS.

Section 120. Term "concentrated commercial feeding stuffs" defined.
121. Statements to be attached to packages; contents; analysis.
122. Statements to be filed with director of agricultural experiment station; to be accompanied by sample.
123. License fee.
124. Analysis to be made by director of experiment station; samples to be taken for analysis.
125. Penalty for violation of article.
126. Sale of adulterated meal or ground grains; penalty.
127. Violation to be reported to the commissioner of agriculture.

§ 120. Term "concentrated commercial feeding stuffs" defined

The term "concentrated commercial feeding stuff" as used in this article, shall include linseed meals, cottonseed meals, peameals, cocoanut meals, gluten meals, gluten feeds, maize feeds, starch feeds, sugar feeds, dried brewer's grains, malt sprouts, hominy feeds, cerealine feeds, rice meals, oat feeds, corn and oat chops, ground beef or fish scraps, mixed feeds, and all other materials of similar nature; but shall not include hays and straws, the whole seeds nor the unmixed meals made directly from the entire grains of wheat, rye, barley, oats, Indian corn, buckwheat, and broom corn. Neither shall it include wheat, rye and buckwheat brans or middlings, not mixed with other substances, but sold separately, as distinct articles of commerce, nor pure grains ground together.

§ 121. **Statements to be attached to packages; contents; analysis.** Every manufacturer, company or person who shall sell, offer or expose for sale or for distribution in this state any concentrated commercial feeding stuff, used for feeding farm live stock, shall furnish with each car or other amount shipped in bulk and shall affix to every package of such feeding stuff in a conspicuous place on the outside thereof, a plainly printed statement clearly and truly certifying the number of net pounds in the package sold or offered for sale, the name or trade mark under which the article is sold, the name of the manufacturer or shipper, the place of manufacture, the place of business and a chemical analysis stating the percentages it contains of crude protein, allowing one per centum of nitrogen to equal six and one-fourth per centum of protein, and of crude fat, both constituents to be determined by the methods prescribed by the director of the New York Agricultural Experiment Station. Whenever any feeding stuff is sold at retail in bulk or in packages belonging to the purchaser, the agent or dealer, upon request of the purchaser shall furnish to him the certified statement named in this section.

§ 122. **Statements to be filed with director of agricultural experiment station; to be accompanied by sample.** Before any manufacturer, company or person shall sell, offer or expose for sale in this state any concentrated commercial feeding stuffs, he or they shall for each and every feeding stuff bearing a distinguishing name or trade mark, file annually during the month of December with the director of the New York Agricultural Experiment Station a certified copy of the statement specified in the preceding section, said certified copy to be accompanied, when the director shall so request, by a sealed glass jar or bottle containing at least one pound of the feeding stuff to be sold or offered for sale, and the company or person furnishing said sample shall thereupon make affidavit that said sample corresponds within reasonable limits to the feeding stuff which it represents, in the percentage of protein and fat which it contains.

(*Amended by chapter* 79 *of the Laws of* 1900.)

§ 123. **License fee.** Each manufacturer, importer, agent or seller of any concentrated commercial feeding stuffs, shall pay annually during the month of December to the treasurer of the New York Agricultural Experiment Station a license fee of twenty-five dollars. Whenever a manufacturer, importer, agent or seller of concentrated commercial feeding stuffs desires at any

time to sell such material and has not paid the license fee therefor in the preceding month of December, as required by this section, he shall pay the license fee prescribed herein before making any such sale. The amount of license fees received by such treasurer pursuant to the provisions of this section shall be paid by him to the treasurer of the state of New York. The treasurer of the state of New York shall pay from such amount when duly appropriated the moneys required for the expense incurred in making such inspection required by this section and enforcing the provisions thereof. The board of control of the New York Agricultural Experiment Station shall report annually to the legislature the amount received pursuant to this article, and the expense incurred for salaries, laboratory expenses, chemical supplies, traveling expenses, printing and other necessary matters. Whenever the manufacturer, importer or shipper of concentrated commercial feeding stuff shall have filed the statement required by section one hundred and twenty-one of this article and paid the license fee as prescribed in this section, no agent or seller of such manufacturer, importer or shipper shall be required to file such statement or pay such fee.

§ 124. **Analysis to be made by director of experiment station; samples to be taken for analysis.** The director of the New York experiment station shall annually analyze, or cause to be analyzed, at least one sample to be taken in the manner hereinafter prescribed, of every concentrated commercial feeding stuff sold or offered for sale under the provisions of this act. Said director shall cause a sample to be taken, not exceeding two pounds in weight, for said analysis, from any lot or package of such commercial feeding stuff which may be in the possession of any manufacturer, importer, agent or dealer in this state; but said sample shall be drawn in the presence of the parties in interest, or their representatives and taken from a parcel or a number of packages, which shall not be less than ten per centum of the whole lot sampled, and shall be thoroughly mixed, and then divided into equal samples, and placed in glass vessels, and carefully sealed and a label placed on each, stating the name of the party from whose stock the sample was drawn and the time and place of drawing, and said label shall also be signed by the person taking the sample, and by the party or parties in interest or their representative at the drawing and sealing of said samples; one of said duplicate samples shall be retained by the director and the other by the party whose stock was sampled; and the sample or samples retained by

the director shall be for comparison with the certified statement named in section one hundred and twenty-two of this article. The result of the analysis of the sample or samples so procured, together with such additional information as circumstances advise, shall be published in reports or bulletins from time to time.

§ 125. **Penalty for violation of action.** Any manufacturer, importer, or person who shall sell, offer or expose for sale or for distribution in this state any concentrated commercial feeding stuff, without complying with the requirements of this article, or any feeding stuff which contains substantially a smaller percentage of constituents than are certified to be contained, shall, on conviction in a court of competent jurisdiction, be fined not more than one hundred dollars for the first offense, and not more than two hundred dollars for each subsequent offense.

§ 126. **Adulterated meal or ground grain, penalty.** Any person who shall adulterate any kind of meal or ground grain with milling or manufacturing offals, or any other substance whatever, for the purpose of sale, unless the true composition, mixture or adulteration thereof is plainly marked or indicated upon the package containing the same or in which it is offered for sale; or any person who knowingly sells, or offers for sale any meal or ground grain which has been so adulterated unless the true composition, mixture or adulteration is plainly marked or indicated upon the package containing the same, or in which it is offered for sale, shall be fined not less than twenty-five or more than one hundred dollars for each offense.

§ 127. **Violation to be reported to the commissioner of agriculture.** Whenever the director becomes cognizant of the violation of any of the provisions of this article, he shall report such violation to the commissioner of agriculture, and said commissioner of agriculture shall prosecute the party or parties thus reported; but it shall be the duty of said commissioner upon thus ascertaining any violation of this article, to forthwith notify the manufacturer, importer or dealer in writing and give him not less than thirty days thereafter in which to comply with the requirements of this article, but there shall be no prosecution in relation to the quality of any concentrated commercial stuff if the same shall be found substantially equivalent to the certified statement named in section one hundred and twenty-two of this article.

§ 2. This act shall take effect December first, eighteen hundred and ninety-nine.

CHAPTER 518.

AN ACT to amend the agricultural law, relating to the manufacture and use of coloring matter in food products.

Became a law May 4, 1899, with the approval of the Governor. Passed, three-fifths being present.

The People of the State of New York, represented in Senate and Assembly, do enact as follows:

Section 1. Article two of chapter three hundred and thirty-eight of the laws of eighteen hundred and ninety-three, entitled "An act in relation to agriculture, constituting articles one, two, three, four and five of chapter thirty-three of the general laws," is hereby amended by inserting therein a new section to be known as section twenty-nine-a, and to read as follows:

§ 29a. No person or persons shall manufacture, sell or expose for sale any poisonous coloring matter for the coloring of food products of any kind, nor shall any person or persons use any poisonous coloring matter manufactured, sold, offered or exposed for sale within this state; nor shall any person or persons sell, offer or expose for sale any food product containing such poisonous coloring matter. The state board of health shall cause samples of coloring matter that are exposed for sale upon the market for use in food products to be analyzed and report the results of such analysis to the legislature at the next session.

§ 2. This act shall take effect immediately.

LAWS OF 1900.

CHAPTER 76.

AN ACT to amend the agricultural law, relating to penalties for watering milk furnished to butter and cheese factories conducted on the co-operative plan.

Became a law March 6, 1900, with the approval of the Governor. Passed, three-fifths being present.

The People of the State of New York, represented in Senate and Assembly, do enact as follows:

Section 1. Section thirty-seven of chapter two hundred and thirty-eight of the laws of eighteen hundred and ninety-three, entitled "An act in relation to agriculture, constituting articles one, two, three, four and five of chapter twenty-three of the general laws," as amended by chapter four hundred and thirty-five of the laws of eighteen hundred and ninety-nine is hereby amended to read as follows:

§ 37. **Penalties.**—Every person violating any of the provisions of articles two and three of sections ninety-one and ninety-two of the agricultural law and chapter four hundred and ninety-one of the laws of eighteen hundred and ninety-eight, shall forfeit to the people of the state of New York a sum of not less than twenty-five dollars nor more than one hundred dollars for every such violation. A person who brings or causes to be brought to a butter or cheese factory owned or operated by a co-operative association, milk diluted with water or any unclean, impure, unhealthy adulterated or unwholesome milk, or milk from which any of the cream has been taken, except pure skim milk to skim cheese factories, shall forfeit to the people of the state for the first offense the sum of fifty dollars and for each subsequent offense the sum of one hundred and fifty dollars; upon recovery of the penalty so prescribed, one-half thereof shall be paid into the state treasury, one-fourth shall be paid into the county treasury, and the remaining one-fourth shall be paid to the treasurer of the co-operative association owning or operating such butter or cheese factory, to

be divided among the members thereof in the same manner as the other receipts of such association. When such violation consists of the manufacture or production of any prohibited article, each day during which or any part of which such manufacture or production is carried on or continued, shall be deemed a separate violation of the provisions of this article. When the violation consists of the sale, or the offering or exposing for sale or exchange of any prohibited article or substance, the sale of each one of several packages shall constitute a separate violation, and each day on which any such article or substance is offered or exposed for sale or exchange shall constitute a separate violation of this article. When the use of any such article or substance is prohibited, each day during which or any part of which said article or substance is so used or furnished for use, shall constitute a separate violation, and the furnishing of the same for use to each person to whom the same may be furnished shall constitute a separate violation. Whoever by himself or another violates any of the provisions of articles two and three and sections ninety-one and ninety-two of the agricultural law shall be guilty of a misdemeanor, and upon conviction shall be punished by a fine of not less than twenty-five dollars, nor more than two hundred dollars, or by imprisonment of not less than one month nor more than six months or by both such fine and imprisonment, for the first offense; and by six months' imprisonment for the second offense.

§ 2. This act shall take effect immediately.

CHAPTER 79.

AN ACT to amend the agricultural law, relating to license fees for selling concentrated commercial feeding stuffs.

Became a law March 7, 1900, with the approval of the Governor. Passed, three-fifths being present.

The People of the State of New York, represented in Senate and Assembly, do enact as follows:

Section 1. Section one hundred and twenty-three of chapter three hundred and thirty-eight of the laws of eighteen hundred and ninety-three, entitled "An act in relation to agricul-

ture, constituting articles one, two, three, four and five of chapter thirty-three of the general laws," as added by chapter five hundred and ten of the laws of eighteen hundred and ninety-nine, is hereby amended to read as follows:

§ 123. License fee.—Each manufacturer, importer, agent or seller of any concentrated commercial feeding stuffs, shall pay annually during the month of December to the treasurer of the New York Agricultural Experiment Station, a license fee of twenty-five dollars for each and every brand sold or offered for sale. Whenever a manufacturer, importer, agent or seller of concentrated commercial feeding stuffs desires at any time to sell such material and has not paid the license fee therefor in the preceding month of December, as required by this section, he shall pay the license fee prescribed herein before making any such sale. The amount of license fees received by such treasurer pursuant to the provisions of this section shall be paid by him to the treasurer of the state of New York. The treasurer of the state of New York shall pay from such amount when duly appropriated the moneys required for the expense incurred in making such inspection required by this section and enforcing the provisions thereof. The board of control of the New York Agricultural Experiment Station shall report annually to the legislature the amount received pursuant to this article, and the expense incurred for salaries, laboratory expenses, chemical supplies, traveling expenses, printing and other necessary matters. Whenever the manufacturer, importer or shipper of concentrated commercial feeding stuff shall have filed the statement required by section one hundred and twenty-one of this article and paid the license fee as prescribed in this section, no agent or seller of such manufacturer, importer or shipper shall be required to file such statement or pay such fee.

§ 2. This act shall take effect immediately.

CHAPTER 87.

AN ACT to amend the agricultural law, relative to distribution of moneys to agricultural societies.

Became a law, March 7, 1900, with the approval of the Governor. Passed, three-fifths being present.

The People of the State of New York, represented in Senate and Assembly, do enact as follows:

Section 1. Section eighty-eight of chapter three hundred and thirty-eight of the laws of eighteen hundred and ninety-three, entitled "An act in relation to agriculture, constituting articles one, two, three, four and five of chapter thirty-three of the general laws," as amended by chapter four hundred and ninety-four of the laws of eighteen hundred and ninety-eight, is hereby amended so as to read as follows:

§ 88. **Receipts and apportionment of moneys for the promotion of agriculture.**—Of all moneys appropriated for the promotion of agriculture in any one year, twenty thousand dollars thereof shall be distributed in premiums by the New York State Agricultural Society; two thousand dollars thereof shall be paid to each of the agricultural societies, agricultural clubs, or agricultural expositions which shall have held annual agricultural fair meetings during each of the three years next preceding such appropriation, and which shall have paid at each of such annual fairs or meetings during such three years the sum of three thousand dollars as premiums for agricultural interests, exclusive of the premiums paid for trials or tests of speed, skill or endurance of man or beast, under the conditions and in the manner provided by section eighty-nine of this chapter. Seventy per centum of the balance of the amount so appropriated shall be apportioned and distributed among the various county agricultural societies, the American Institute of the City of New York, and any agricultural society which has received from the state funds no money, except that set apart for or distributed to county agricultural societies, and thirty per centum thereof among the various town and other agricultural societies, agricultural clubs or agricultural expositions entitled by this section to receive thirty per centum of the moneys received by the comptroller from the tax collected

from the racing associations, corporations or clubs of the state. Such apportionment and distribution shall be made by the commissioner of agriculture in the following manner: One-half of the seventy per centum to be apportioned to such county agricultural societies, the American Institute of the City of New York, and any agricultural society which has received from the state funds no money except that set apart for or distributed to county agricultural societies, shall be apportioned and distributed equally and the remainder in proportion to the actual premiums paid during the previous year by such societies and institute, exclusive of premiums paid for trials or tests of speed, skill or endurance of man or beast. If there is no county agricultural society in any county, or if the county agricultural society is not in active operation as such, then the town society or societies in such county, or other agricultural societies in such county, except the New York State Agricultural Society, that would otherwise be entitled to share under the thirty per centum distribution referred to in this section, shall share jointly in the distribution of such money on the same basis as they would if they were a county agricultural society, provided such societies sustain a public fair with premium list, which premium list and reports of such societies shall be forwarded and made to the commissioner of agriculture. Of the thirty per centum to be distributed among the various town and other agricultural societies, clubs or expositions one-third thereof shall be apportioned and distributed equally and the remainder in proportion to the premiums awarded and paid by said society, club or exposition for exhibits made at the annual fair upon the awards or premiums of which they seek a portion of the money to be distributed, exclusive of premiums paid for trials or tests of speed, skill or endurance of man or beast. No proportion of such amount shall be paid to any such society, club or exposition in which the actual amount paid by it as such premiums in the year preceding such apportionment, is less than five hundred dollars. All revenues which have been or shall be received by the comptroller, and not distributed as heretofore provided, and all moneys received by him from the tax collected from racing associations pursuant to chapter one hundred and ninety-seven of the laws of eighteen hundred and ninety-four, and chap-

ter five hundred and seventy of the laws of eighteen hundred and ninety-five, and all acts amendatory thereto, or hereafter otherwise collected from racing associations, corporations or clubs, shall constitute a fund, which shall be annually disbursed on behalf of the state for prizes for improving the breed of cattle, sheep and horses at the various fairs throughout the state as hereinafter prescribed. Thirty per centum of the funds so collected shall be disbursed by the commissioner of agriculture among the agricultural societies, agricultural clubs or agricultural expositions of the state, which had not, previous to May twenty-ninth, eighteen hundred and ninety-five, received appropriations from the state, other than appropriations that they received from the fund to be distributed to county societies from the fact that there was no county society in existence or in active operation within the county, as follows: One-third shall be apportioned and distributed equally and the remainder in proportion to the premiums awarded and paid by said society, club or exposition for exhibits made at the annual fairs upon the awards or premiums of which they seek a portion of the money to be distributed, such sums shall only be paid to such societies which have received appropriations from the state previous to the passage of this act, and are now duly organized under the laws of the state of New York, and in active operation in counties having a population according to the census of eighteen hundred and ninety-two of over three hundred and twenty-five thousand inhabitants, or which shall have held fairs, annually, during each of the three years prior to May twenty-ninth, eighteen hundred and ninety-five, and which shall have paid, at their annual meetings or fairs during such three years, not less than one thousand dollars in the aggregate as premiums for agricultural, mechanical and domestic products, exclusive of the premiums paid for trials or tests of speed, skill or endurance of man or beast, and which shall have filed their report with the commissioner of agriculture, on or before July first, eighteen hundred and ninety-five, as heretofore provided in chapter eight hundred and twenty of the laws of eighteen hundred and ninety-five. Seventy per centum of such funds shall be disbursed by the commissioner of agriculture among the various county agricultural

societies throughout the state, the American Institute in the City of New York, and any agricultural society which has received from the state funds no money except that set apart or distributed to county agricultural societies, as follows: One-half shall be apportioned and distributed equally, and the remainder in proportion to the premiums awarded and paid by said society, club or exposition, for exhibits made at the annual fair upon the awards or premiums of which they seek a portion of the money to be distributed, exclusive of premiums paid for trials or tests of speed, skill or endurance of man or beast. If there is no county agricultural society in any county, or if the county agricultural society is not in active operation as such, then the town society or societies in such county, or other agricultural societies in such county, except the New York State Agricultural Society, that would otherwise be entitled to share under the thirty per centum distribution referred to in this section, shall share jointly in the distribution of such money on the same basis as they would if they were a county agricultural society, provided such societies sustain a public fair, with premium list, and reports of such societies shall be forwarded and made to the commissioner of agriculture, and any agricultural society which has received each year since its incorporation, money from the state of the same amount as if said society were the county society, shall continue to share in the funds the same as though it were actually the county society, on condition that it shall fulfill the provisions of this act as to holding fairs, paying premiums and filing reports, and any fair association which shall have received no money from the state funds except that distributed to county agricultural societies, and shall have held a fair as required by this act, shall receive from the funds apportioned to county agricultural societies in the same relative proportion as if it were actually the county society and shall share in any part of any year's fund set apart or retained from the money apportioned to agricultural societies for that year in the same relative amount as any county agricultural society shared in the agricultural society funds of that year, and such society shall hereafter be subject to all provisions of this act relating to county agricultural societies. All agricultural socie-

ties, agricultural clubs or agricultural expositions entitled to receive any portion of the moneys appropriated by the state must hereafter, on or before the fifteenth day of December, in each year, file a statement, duly verified by the secretary and treasurer, showing the amount of premiums paid at the last annual fair, exclusive of the premiums paid for trials or tests of speed, skill or endurance of man or beast, which statement shall be filed in the office of the commissioner of agriculture, otherwise such society, club or exposition shall forfeit its right to participate in the distribution of such moneys for premiums paid for such year. No proportion of such moneys shall be paid to any such society, club or exposition in which the actual amount paid by it as such premiums in the year preceding such apportionment, is less than five hundred dollars. Any town or other agricultural society in a county in which there is no county agricultural society in active operation and which, according to the terms of this section receives any portion of the seventy per centum of such funds apportioned to county agricultural societies, shall not receive any portion of the thirty per centum of such funds. Any such society, club or exposition, receiving the sum of two thousand dollars under the provisions of section eighty-nine of this act, shall not receive any other portion of the money appropriated for the promotion of agriculture. Any such agricultural society, agricultural club, agricultural exposition, or agricultural fair association, organized under the laws of the state of New York, which shall fail or neglect to hold annual fairs and file their annual reports as provided by this law, with the commissioner of agriculture, for two consecutive years, shall forfeit all of their chartered rights, including any privileges or moneys they might thereafter otherwise be entitled to under this act.

§ 2. This act shall take effect immediately.

CHAPTER 101.

AN ACT to amend the agricultural law, relating to the sale of adulterated milk or cream.

Became a law, March 12, 1900, with the approval of the Governor. Passed, three-fifths being present.

The People of the State of New York, represented in Senate and Assembly, do enact as follows:

Section 1. Section twenty-two of chapter three hundred and thirty-eight of the laws of eighteen hundred and ninety-three, entitled "An act in relation to agriculture, constituting articles one, two, three, four and five of chapter thirty-three of the general laws," is hereby amended to read as follows:

§ 22. **Prohibition of the sale of adulterated milk.**—No person shall sell or exchange, or offer or expose for sale or exchange, any unclean, impure, unhealthy, adulterated or unwholesome milk or any cream from the same, or any unclean, impure, unhealthy, adulterated, colored, or unwholesome cream, or sell or exchange or offer or expose for sale or exchange any article of food made from such milk or cream or manufacture from any such milk or cream any article of food.

§ 2. This act shall take effect immediately.

CHAPTER 118.

AN ACT to amend chapter three hundred and thirty-eight of the laws of eighteen hundred and ninety-three, entitled "An act in relation to agriculture, constituting articles one, two, three, four and five of chapter thirty-three of the general laws" relative to diseases of domestic animals.

Became a law, March 14, 1900, with the approval of the Governor. Passed, three-fifths being present.

The People of the State of New York, represented in Senate and Assembly, do enact as follows:

Section 1. Section sixty of said act is hereby amended so as to read as follows:

§ 60. **Suppression of infectious and contagious disease.**—Whenever any infectious or contagious disease except tuberculo-

sis and glanders, affecting domestic animals shall be brought into or break out in this state, the commissioner of agriculture shall take measures to promptly suppress the same, and to prevent such disease from spreading.

§ 2. Section sixty-five of said act is hereby amended so as to read as follows:

§ 65. Regulations and the enforcement thereof.—The commissioner may prescribe such regulations as in his judgment may be thought suited for the suppression or prevention of the spread of any such disease, and for the disinfection of all premises, buildings, railway cars, vessels and other objects from or by means of which infection or contagion may take place or be conveyed. He may alter or modify, from time to time, as he may deem expedient, the terms of all notices, orders and regulations issued or made by him, and may at any time cancel or withdraw the same. He may call upon the sheriff or deputy sheriff, to carry out and enforce the provisions of any notice, order or regulation which he may make, and all such sheriffs and deputy sheriffs shall obey and observe all orders and instructions which they may receive from him in the premises. If the commissioner shall quarantine any particular district or territory for the purpose of stopping or preventing the spread of the disease known as rabies and if any dog be found loose within the said quarantine district in violation of said quarantine or regulation, any person may kill or cause to be killed such dog and shall not be held to be liable for damages for such killing.

§ 3. This act shall take effect immediately.

CHAPTER 339.

AN ACT to amend the agricultural law, relative to the distribution of moneys to agricultural societies.

Became a law, April 9, 1900, with the approval of the Governor. Passed, three-fifths being present.

The People of the State of New York, represented in Senate and Assembly, do enact as follows:

Section 1. Section eighty-eight of chapter three hundred and thirty-eight of the laws of eighteen hundred and ninety-three, en-

titled "An act in relation to agriculture, constituting articles one, two, three, four and five, of chapter thirty-three of the general laws," as amended by chapter two hundred and forty-one of the laws of eighteen hundred and ninety-four, by chapter eight hundred and twenty of the laws of eighteen hundred and ninety-five, and by chapter four hundred and ninety-four of the laws of eighteen hundred and ninety-eight, and by chapter eighty-seven of the laws of nineteen hundred, is hereby amended to read as follows:

§ 88. **Receipts and apportionment of moneys for the promotion of agriculture.**—Of all moneys appropriated for the promotion of agriculture in any one year, twenty thousand dollars thereof shall be distributed in premiums by the New York State Agricultural Society; two thousand dollars thereof shall be paid to each of the agricultural societies, agricultural clubs, or agricultural expositions which shall have held annual agricultural fairs, or meetings, during each of the three years next preceding such appropriation, and which shall have paid at each of such annual fairs or meetings during such three years the sum of three thousand dollars as premiums for agricultural interests, exclusive of the premiums paid for trials or tests of speed, skill or endurance of man or beast, under the conditions and in the manner provided by section eighty-nine of this chapter. Seventy per centum of the balance of the amount so appropriated shall be apportioned and distributed among the various county agricultural societies, the American Institute in the City of New York, and any agricultural society which has received from the state funds no money except that set apart for or distributed to county agricultural societies, and thirty per centum thereof among the various town and other agricultural societies, agricultural clubs or agricultural expositions entitled by this section to receive thirty per centum of the moneys received by the comptroller from the tax collected from the racing associations, corporations or clubs of the state. Such apportionment and distribution shall be made by the commissioner of agriculture in the following manner: One-half of the seventy per centum to be apportioned to such county agricultural societies, the American Institute in the City of New York and any agricultural society which has received from the state funds no

money except that set apart for or distributed to county agricultural societies shall be apportioned and distributed equally and the remainder in proportion to the actual premiums paid during the previous year by such societies and institute exclusive of premiums paid for trials or tests of speed, skill or endurance of man or beast. If there is no county agricultural society in any county, or if the county agricultural society is not in active operation as such, then the town society or societies in such county or other agricultural societies in such county, except the New York State Agricultural Society, that would otherwise be entitled to share under the thirty per centum distribution referred to in this section, shall share jointly in the distribution of such money on the same basis as they would if they were a county agricultural society, provided such societies sustain a public fair with premium list, which premium list and reports of such societies shall be forwarded and made to the commissioner of agriculture. Of the thirty per centum to be distributed among the various town and other agricultural societies, clubs or expositions, one-third thereof shall be apportioned and distributed equally and the remainder in proportion to the premiums awarded and paid by said society, club or exposition for exhibits made at the annual fair upon the awards or premiums of which they seek a portion of the money to be distributed, exclusive of premiums paid for trials or tests of speed, skill or endurance of man or beast. No proportion of such amount shall be paid to any such society, club or exposition in which the actual amount paid by it as such premiums in the year preceding such proportionment is less than five hundred dollars. All revenues which have been or shall be received by the comptroller and not distributed as heretofore provided, and all moneys received by him from the tax collected from racing associations pursuant to chapter one hundred and ninety-seven of the laws of eighteen hundred and ninety-four, and chapter five hundred and seventy of the laws of eighteen hundred and ninety-five, and all acts amendatory thereto, or hereafter otherwise collected from racing associations, corporations or clubs, shall constitute a fund, which shall be annually disbursed on behalf of the state for prizes for improving the breed of cattle, sheep and horses at the various fairs throughout the state as hereinafter prescribed. Thirty per

centum of the funds so collected shall be disbursed by the commissioner of agriculture among the agricultural societies, agricultural clubs or agricultural expositions of the state, which had not, previous to May twenty-ninth, eighteen hundred and ninety-five, received appropriations from the state, other than appropriations that they received from the fund to be distributed to county societies from the fact that there was no county society in existence or in active operation within that county, as follows: One-third shall be apportioned and distributed equally and the remainder in proportion to the premiums awarded and paid by said society, club or exposition for exhibits made at the annual fairs upon the award or premiums of which they seek a portion of the money to be distributed, such sums shall only be paid to such societies which have received appropriations from the state previous to the passage of this act, and are now duly organized under the laws of the state of New York, and in active operation, or which shall have held fairs annually during each of the three years prior to May twenty-ninth, eighteen hundred and ninety-five, and which shall have paid, at their annual meetings or fairs during such three years, not less than one thousand dollars in the aggregate as premiums for agriculture, mechanical and domestic products, exclusive of the premiums paid for trials or tests of speed, skill or endurance of man or beast, and which shall have filed their report with the commissioner of agriculture on or before July first, eighteen hundred and ninety-five, as heretofore provided in chapter eight hundred and twenty of the laws of eighteen hundred and ninety-five. Seventy per centum of such funds shall be disbursed by the commissioner of agriculture among the various county agricultural societies throughout the state, the American Institute in the City of New York, and any agricultural society which has received from the state funds no money except that set apart or distributed to county agricultural societies, as follows: One-half shall be apportioned and distributed equally, and the remainder in proportion to the premiums awarded and paid by said society, club or exposition, for exhibits made at the annual fair upon the awards or premiums of which they seek a portion of the money to be distributed, exclusive of premiums paid for trials or tests of speed, skill or endur-

ance of man or beast. If there is no county agricultural society in any county, or if the county agricultural society is not in active operation as such, then the town society or societies in such county, or other agricultural societies in such county, except the New York State Agricultural Society, that would otherwise be entitled to share under the thirty per centum distribution referred to in this section, shall share jointly in the distribution of such money on the same basis as they would if they were a county agricultural society, provided such societies sustain a public fair, with premium list and reports of such societies shall be forwarded and made to the commissioner of agriculture, and any agricultural society which has received each year since its incorporation, money from the state of the same amount as if said society were the county society, shall continue to share in the funds the same as though it were actually the county society, on condition that it shall fulfill the provisions of this act as to holding fairs, paying premiums and filing reports, and any fair association which shall have received no money from the state funds except that distributed to county agricultural societies, and shall have held a fair as required by this act, shall receive from the funds apportioned to county agricultural societies in the same relative proportion as if it were actually the county society and shall share in any part of any year's fund set apart or retained from the money apportioned to agricultural societies for that year in the same relative amount as any county agricultural society shared in the agricultural society funds of that year, and such society shall hereafter be subject to all provisions of this act relating to county agricultural societies. All agricultural societies, agricultural clubs or agricultural expositions, entitled to receive any portion of the moneys appropriated by the state must hereafter, on or before the fifteenth day of December, in each year file a statement, duly verified by the president and treasurer, showing the amount of premiums paid at the last annual fair, exclusive of premiums paid for trials or tests of speed, skill or endurance of man or beast, which statement together with vouchers for moneys paid as premiums shall be filed in the office of the commissioner of agriculture, otherwise such society, club or exposition shall forfeit its right to participate in the dis-

tribution of such moneys for premiums paid for such year. No proportion of such moneys shall be paid to any such society, club or exposition, in which the actual amount paid by it as such premiums in the year preceding such apportionment, is less than five hundred dollars. Any town or other agricultural society in a county in which there is no county agricultural society in active operation, and which according to the terms of this section, receives any portion of the seventy per centum of such funds apportioned to county agricultural societies, shall not receive any proportion of the thirty per centum of such funds. Any such society, club or exposition, receiving the sum of two thousand dollars under the provisions of section eighty-nine of this act, shall not receive any other portion of the money appropriated for the promotion of agriculture. Any such agricultural society, agricultural club, agricultural exposition, or agricultural fair association, organized under the laws of the state of New York, which shall fail or neglect to hold annual fairs and file their annual reports as provided by this law, with the commissioner of agriculture for two consecutive years, shall forfeit all of their chartered rights including any privileges or moneys they might thereafter otherwise be entitled to under this act. Any agricultural society, agricultural club or agricultural exposition which shall use, or permit the use of any gambling device, device, instrument or contrivance in the operation of which bets are laid or wagers made, wheel of fortune, or the playing or carrying on of any game of chance, upon the grounds used by it for, or during, an annual meeting, fair or exhibition, shall thereupon forfeit it right to any moneys it would or might be entitled to receive under the provisions of this act; and it shall be the duty of the president and secretary, or treasurer of every agricultural society, agricultural club or agricultural exposition entitled to receive money under the provisions of this act, to certify, in their annual report to the commissioner of agriculture executed under oath, on or before the fifteenth day of December in each year, that at the last annual meeting, fair or exhibition held by or under the direction of such society, club or exposition, it did not use or permit the use of, any gambling device, device, instrument or contrivance in the operation of which bets were laid or wagers

made, any wheel of fortune, or the playing or carrying on of any game of chance, upon the grounds used by it for, or during, such last annual meeting, fair or exhibition, which report shall be filed, not later than ten days after the date of its execution, in the office of the commissioner of agriculture. If the president and secretary or treasurer of any agricultural society, agricultural club or agricultural exposition, entitled to receive moneys under the provisions of this act, shall neglect or refuse to make and file such certificate, such society, club or exposition shall thereupon be deemed to have forfeited all its rights to any moneys it might otherwise be entitled to receive under this act, but this shall not be construed to prohibit horse racing or tests or trials of skill.

§ 2. This act shall take effect immediately.

CHAPTER 346.

AN ACT to amend the agricultural law, in relation to state fairs.

Became a law, April 10, 1900, with the approval of the Governor. Passed, three-fifths being present.

The People of the State of New York, represented in Senate and Assembly, do enact as follows:

Section 1. Chapter three hundred and thirty-eight of the laws of eighteen hundred and ninety-three, entitled "An act in relation to agriculture, constituting articles one, two, three, four and five of chapter thirty-three of the general laws," is hereby amended by adding at the end thereof a new article to be known as article ten, and to read as follows:

ARTICLE X.

STATE FAIR.

Section 140. Property in town of Geddes, Onondaga county, New York.
141. State fair commission.
142. State fair.
143. Superintendent of state fair; assistants and employees.
144. Receipts and disbursements.

Section 145. Expenses of commission.
146. State and local agricultural fairs not to be held at same time. Premiums for county or town agricultural association exhibits.

Section 140. Property in town of Geddes, Onondaga county.—The conveyance to the state by the New York State Agricultural Society of its property in the town of Geddes, Onondaga county, New York, by deed dated July twenty-eight, eighteen hundred and ninety-nine, and recorded in the office of the comptroller, is hereby accepted, ratified and confirmed. Such property, and any other property hereafter acquired by the state for state fair purposes shall be under the management and control of the state fair commission as hereinafter provided, and it may, from time to time, make rules and provide for the care, preservation and improvement thereof.

§ 141. State fair commission.—The state fair commission shall consist of eleven members, of whom the lieutenant-governor and the commissioner of agriculture shall ex officio constitute two. The remaining nine members of such commission shall be appointed by the governor, one of whom shall be a member of the New York State Grange, one a member of the New York State Association of County Agricultural Societies, and one a member of the Union Association of Agricultural Societies. Of the nine members first appointed hereunder, three shall hold for a term of one year, three for a term of two years and three for a term of three years. Their successors shall each be appointed for a term of three years. In case of a vacancy in the office of the members appointed from the societies or associations above mentioned, their successors shall be appointed from the same societies or associations.

§ 142. State fair.—It shall be the duty of the said commission to hold a state fair at such times as it may deem proper, and to publish the time of holding said fair in the month of January preceding in each year after the year nineteen hundred. Such commission may make, alter, suspend or repeal needed rules relating to such fair, including the times and duration thereof, the terms and conditions of entries and admissions, exhibits,

sale of privileges, payment of premiums, and any other matters which it may deem proper in connection with such fair. It shall furnish to each person who on the seventeenth day of January, nineteen hundred, was a life member of the State Agricultural Society, a free admission to the fair ground during the fair of each year during the life of such member.

§ 143. **Superintendent of state fairs; assistants and employes.**—The state fair commission may appoint a superintendent of the state fair and such other assistants and employes as they may deem necessary. It may prescribe their duties and fix their compensation. Such superintendent, assistants and employes shall be subject to removal at the pleasure of such commission.

§ 144. **Receipts and disbursements.**—The commission shall receive all moneys payable to the state on account of said fair, and make all disbursements therefrom and also from any appropriation made for that purpose by the legislature as may be needed, from time to time, in carrying on the work of the commission. At the close of each fair, the commission shall pay to the state treasurer any balance remaining in its hands received in connection with the state fair, and at the same time deliver to the comptroller an itemized verified report showing all receipts and disbursements for state fair purposes since the last report.

§ 145. **Expenses of commission.**—The commission shall receive no compensation for their services, but shall be entitled to receive the actual and necessary expenses incurred by them in the performance of their duties, to be paid on the certificate of the commissioner of agriculture and the audit and warrant of the comptroller.

§ 146. **State and local agricultural fairs not to be held at the same time; premiums for county and town agricultural association exhibits.**—A county or other local association which holds its fair during the same week in which a state fair is held, after the year nineteen hundred, shall not be entitled to share in any appropriation or apportionment of moneys for the current year, payable under statute to county or local agricultural societies. For the best exhibits by county and town societies, one thousand dollars in premiums shall be annually awarded.

§ 2. This act shall take effect immediately.

CHAPTER 390.

AN ACT providing for horticultural investigations, experiments, instruction and information, and for the dissemination of horticultural knowledge by the agricultural station at Geneva, in the county of Ontario, and making an appropriation therefor.

Became a law April 12, 1900, with the approval of the Governor. Passed, three-fifths being present.

The People of the State of New York, represented in Senate and Assembly, do enact as follows:

Section 1. The sum of eight thousand dollars, or so much thereof as may be necessary, is hereby appropriated out of any moneys in the treasury not otherwise appropriated, for the purpose of conducting horticultural investigations, experiments, instruction and information, and to disseminate horticultural knowledge, to be paid to the New York State Agricultural Experiment Station at Geneva, county of Ontario, as provided for in and pursuant to section eighty-five of the agricultural law. Such money hereby appropriated shall be paid by the treasurer on the warrant of the comptroller, upon vouchers approved by the commissioner of agriculture.

§ 2. This act shall take effect immediately.

CHAPTER 394.

AN ACT making an appropriation of moneys collected and due from racing associations for the promotion of agriculture.

Became a law, April 12, 1900, with the approval of the Governor. Passed, three-fifths being present.

The People of the State of New York, represented in Senate and Assembly, do enact as follows:

Section 1. The sum of ninety-eight thousand dollars of the amount collected and due from racing associations in pursuance of chapter four hundred and seventy-nine of the laws of eighteen hundred and eighty-seven, as amended by chapter one hundred and ninety-seven of the laws of eighteen hundred and ninety-four, and chapter five hundred and seventy of the laws of eighteen

hundred and ninety-five, and all acts amendatory thereof or supplementary thereto is hereby appropriated out of any moneys in the treasury so collected at the time of the distribution thereof as herein provided. Such sum shall be distributed in the manner provided by section eighty-eight of the agricultural law, and in the proportion provided therein for the distribution of such moneys, and shall be payable by the treasurer on the warrant of the comptroller on the order of the commissioner of agriculture.

§ 2. This act shall take effect immediately.

CHAPTER 534.

AN ACT to amend the agricultural law, relative to violations thereof.

Became a law, April 19, 1900, with the approval of the Governor. Passed, three-fifths being present.

The People of the State of New York, represented in Senate and Assembly, do enact as follows:

Section 1. Section twenty-seven of chapter three hundred and thirty-eight of the laws of eighteen hundred and ninety-three, entitled "An act in relation to agriculture, constituting articles one, two, three, four and five of chapter thirty-three of the general laws," as amended by chapter one hundred and forty-nine of the laws of eighteen hundred and ninety-nine, is hereby amended so as to read as follows:

§ 27. Manufacture or mixing of animal fats with milk, cream or butter prohibited.—No person shall manufacture, mix or compound with or add to natural milk, cream or butter any animal fats or animal or vegetable oils, nor make or manufacture any oleaginous substance not produced from milk or cream, with intent to sell the same as butter or cheese made from unadulterated milk or cream or have the same in his possession with such intent; nor shall any person solicit or take orders for the same or offer the same for sale, nor shall any such article or substance or compound so made or produced, be sold as and for butter or cheese, the product of the dairy. No person shall coat, powder or color with annatto or any coloring matter whatever, butterine or

oleomargarine or any compound of the same or any product or manufacture made in whole or in part from animal fats or animal or vegetable oils not produced from unadulterated milk or cream by means of which such product, manufacture or compound shall resemble butter or cheese, the product of the dairy; nor shall he have the same in his possession with intent to sell the same nor shall he sell or offer to sell the same. No person by himself, his agents or employees, shall manufacture, sell, offer or expose for sale, butter that is produced by taking original packing stock or other butter or both and melting the same, so that the butter fat can be drawn off, then mixing the said butter fat with skimmed milk or milk or cream or other milk product and rechurning the said mixture, or that is produced by any similar process and is commonly known as boiled or process butter, unless he shall plainly brand or mark the package or tub or wrapper in which the same is put up in a conspicuous place with the words "renovated butter." If the same shall be put up, sold, offered or exposed for sale in prints or rolls, then the said prints or rolls shall be labeled plainly with printed letters in a conspicuous place on the wrapper with the words "renovated butter." If the same is packed in tubs or boxes or pails or other kind of a case or package the words "renovated butter" shall be printed on the top and side of the same in letters, at least, one inch in length, so as to be plainly seen by the purchaser. If such butter is exposed for sale, uncovered, not in a package or case, a placard containing the label so printed shall be attached to the mass of butter in such manner as to easily be seen and read by the purchaser. No person shall sell, offer or expose for sale, any butter or other dairy products containing a preservative, but this shall not be construed to prohibit the use of salt in butter or cheese, or spirituous liquors in club or other fancy cheese or sugar in condensed milk. No person or persons, firm, association or corporation shall induce or attempt to induce any person or persons to violate any of the provisions of the agricultural law. Any person, firm, association or corporation selling, offering or advertising for sale any substance, preparation or matter for use in violation of the provisions of the agricultural law shall be guilty of a violation of this act.

§ 2. This act shall take effect immediately.

CHAPTER 544.

AN ACT to amend the agricultural law, relating to tests for ascertaining the amount of fats in milk.

Became a law April 19, 1900, with the approval of the Governor. Passed, three-fifths being present.

The People of the State of New York, represented in Senate and Assembly, do enact as follows:

Section 1. Section twenty-three of chapter three hundred and thirty-eight of the laws of eighteen hundred and ninety-three, entitled "An act in relation to agriculture, constituting articles one, two, three, four and five of chapter thirty-three of the general laws," is hereby amended to read as follows:

§ 23. Regulations in regard to butter and cheese factories.—No person shall sell, supply or bring to be manufactured to any butter or cheese factory any milk diluted with water, or any unclean, impure, unhealthy, adulterated or unwholesome milk, or milk from which any of the cream has been taken, except pure skim milk to skim-cheese factories. No person shall sell, supply or bring to be manufactured to any butter or cheese factory any milk from which there has been kept back any part of the milk commonly known as strippings, or any milk that is sour, except pure skim milk to skim-cheese factories. The owner or proprietor or the persons having charge of any butter or cheese factory, not buying all the milk used by him, shall not use for his own benefit, or allow any of his employes or any other person to use for his own benefit, any milk, cream, butter or cheese or any other product thereof, brought to such factory, without the consent of the owners of such milk or the products thereof. Every butter or cheese manufacturer not buying all the milk he uses, shall keep a correct account of all the milk daily received, of the number of packages of butter and cheese made each day, and the number of packages and aggregate weight of cheese and butter disposed of each day; which account shall be open to inspection to any person who delivers milk to such factory. Whenever manufacturers of butter or cheese purchase milk upon the basis of the amount of fat contained therein and use for ascertaining the amount of such fat what is known as the Babcock test, the

bottles used in such test shall before use be examined by the director of the Geneva Experimental Station. If such bottles are found to be properly constructed and graded so as to accurately show the amount of fat contained in milk, each of them shall be legibly and indelibly marked "S. B." No bottle shall be so marked except as herein provided nor shall be used in any such test by such manufacturers, unless so examined and marked. The acid used in making such test by such manufacturers shall be examined from time to time by competent chemists employed by the commissioner of agriculture and if found not to be of sufficient strength the use of such acid shall be prohibited. The commissioner of agriculture or persons employed by him for that purpose may at any time assist in mailing tests of milk received at a butter or cheese factory for the purpose of determining the efficiency of tests usually made at such factory. All persons using other than standard bottles or acid which is not of the required strength to accurately determine the amount of fats in milk, shall be subject to the penalties prescribed by section thirty-seven of this article, and shall be guilty of a misdemeanor.

§ 2. This act shall take effect immediately.

CHAPTER 559.

AN ACT to amend the agricultural law, relating to penalties for watering milk furnished to butter and cheese factories conducted on the co-operative plan.

Became a law April 20, 1900, with the approval of the Governor. Passed, three-fifths being present.

The People of the State of New York, represented in Senate and Assembly, do enact as follows:

Section 1. Section thirty-seven of chapter three hundred and thirty-eight of the laws of eighteen hundred and ninety-three, entitled "An act in relation to agriculture, constituting articles one, two, three, four and five of chapter twenty-three of the general laws," as amended by chapter four hundred and thirty-five of the laws of eighteen hundred and ninety-nine and chapter seventy-

six of the laws of nineteen hundred, is hereby amended to read as follows:

§ 37. **Penalties.**—Every person violating any of the provisions of articles two and three and sections ninety-one and ninety-two of the agricultural law and chapter four hundred and ninety-one of the laws of eighteen hundred and ninety-eight shall forfeit to the people of the state of New York the sum of not less than twenty-five dollars nor more than one hundred dollars for every such violation. A person who brings or causes to be brought to a butter or cheese factory owned or operated by a co-operative association, milk diluted with water or any unclean, impure, unhealthy, adulterated or unwholesome milk, or milk from which any of the cream has been taken, except pure skim milk to skim cheese factories, shall forfeit to the people of the state for the first offense the sum of fifty dollars and for each subsequent offense the sum of one hundred and fifty dollars; upon recovery of the penalty so prescribed, one-half thereof shall be paid into the state treasury, one-fourth shall be paid into the county treasury, and the remaining one-fourth shall be paid to the treasurer of the co-operative association owning or operating such butter or cheese factory, to be divided among the members thereof in the same manner as the other receipts of such association. When such violation consists of the manufacture or production of any prohibited article, each day during which or any part of which such manufacture or production is carried on or continued, shall be deemed a separate violation of the provisions of this article. When the violation consists of the sale, or the offering or exposing for sale or exchange of any prohibited article or substance, the sale of each one of several packages shall constitute a separate violation, and each day on which any such article or substance is offered or exposed for sale or exchange shall constitute a separate violation of this article. When the use of any such article or substance is prohibited, each day during which or any part of which said article or substance is so used or furnished for use, shall constitute a separate violation, and the furnishing of the same for use to each person to whom the same may be furnished shall constitute a separate violation. Whoever by himself or another violates any of the provisions of articles two and three of sections ninety-one and ninety-two of the agricultural law shall be

guilty of a misdemeanor, and upon conviction shall be punished by a fine of not less than twenty-five dollars, nor more than two hundred dollars, or by imprisonment of not less than one month nor more than six months or by both such fine and imprisonment, for the first offense; and by six months' imprisonment for the second offense.

§ 2. This act shall take effect immediately.

MISCELLANEOUS LAWS, 1900.

CHAPTER 171.

AN ACT to amend chapter three hundred and twenty-five of the laws of eighteen hundred and ninety-eight entitled "An act to prevent the application of poison to fruit trees while in blossom," relative to experiments at experimental stations.

Became a law March 22, 1900, with the approval of the Governor. Passed, three-fifths being present.

The People of the State of New York, represented in Senate and Assembly, do enact as follows:

Section 1. Section one of chapter three hundred and twenty-five of the laws of eighteen hundred and ninety-eight, entitled "An act to prevent the application of poison to fruit trees while in blossom," is hereby amended to read as follows:

§ 1. Any person who shall spray with, or apply in any way poison or any poisonous substance, to fruit trees while the same are in blossom, is guilty of a misdemeanor, punishable by a fine of not less than ten dollars nor more than fifty dollars; provided, however, that nothing in this section shall prevent the directors of the experimental stations at Ithaca and Geneva from conducting experiments in the application of poison and spraying mixtures to fruit trees while in blossom.

§ 2. This act shall take effect immediately.

CHAPTER 333.

AN ACT to amend the membership corporations law, relating to policemen on exhibition grounds of agricultural and horticultural corporations.

Became a law April 6, 1900, with the approval of the Governor. Passed, three-fifths being present.

The People of the State of New York, represented in Senate and Assembly, do enact as follows:

Section 1. Section one hundred and forty-three of chapter five hundred and fifty-nine of the laws of eighteen hundred and ninety-five, entitled "An act relating to membership corporations, constituting chapter forty-three of the general laws," is hereby amended to read as follows:

§ 143. **Police and magistrates on exhibition grounds.**—The board of directors of any such corporation, or the executive committee of such board, may appoint a chief of police and as many citizens of this state as may be necessary to act as policemen at their exhibitions. The chief of police may also while acting as such appoint such additional policemen as he may deem advisable. Such chief of police and policemen shall preserve order within and for a space of two hundred yards from and around the grounds of the corporation, protect the property within such grounds and space, and eject all persons improperly therein, or acting disorderly therein, or who neglect or refuse to pay the entrance fee or observe the rules prescribed by the corporation. Any of such officers may arrest without a warrant, any person whom he has reasonable cause to believe has unlawfully and fraudulently entered the exhibition grounds of such corporation without paying the entrance fee therefor. They shall have the same power within such grounds and space, during the time such exhibition continues, and for twenty-four hours thereafter, that a constable has by law, in serving criminal process, making arrests and preserving the peace. No town or county shall be liable to pay any such policemen for services rendered under this section. Such corporations may regulate or prevent all kinds of theatrical, or circus, exhibitions and shows, huckstering and traffic in fruits, goods, wares and mer-

chandise, of whatever description, and shall prevent all kinds of mountebank exhibitions or shows, for gain on the fair days and within a distance of two hundred yards of the fair grounds of such corporation, as it deems the same to obstruct or in any way interfere with the free and uninterrupted use of the highways around and approaching such fair grounds. A justice of the peace of the country in which such grounds are situated, may, while upon such grounds, hold a court of special sessions, having the same duties, powers and jurisdictions over offenses committed upon such grounds and within two hundred yards of the boundaries thereof, as is had by a court of special sessions of a town of such county over offenses committed in the town. The fines and penalties received by a justice of the peace under this section shall, before the close of the fair or exhibition at which the same are received, be handed over by him to such society, for its use, together with a written report of his proceedings during such fair or exhibition. The report shall be in all respect the same as an annual account rendered for services in criminal proceedings by a justice of the peace of a town to the board of town auditors. The justice shall receive as compensation for his services under this section his legal fees to be paid by such society. The justice shall include in his annual report to the board the offenses committed and the proceedings had under this section, and the disposition made by him of fines and penalties collected. The justice shall enter in his regular criminal docket the full proceedings of all matters coming before him under this section, stating each case separately; and the record of such proceedings shall be kept open for public inspection upon such grounds during such fair or exhibition.

§ 2. This act shall take effect immediately.

CHAPTER 344.

AN ACT making an appropriation to continue the promotion of sugar beet culture, in accordance with the provisions of chapter five hundred of the laws of eighteen hundred and ninety-seven.

Became a law April 9, 1900, with the approval of the Governor. Passed, three-fifths being present.

The People of the State of New York, represented in Senate and Assembly, do enact as follows:

Section 1. The sum of fifty thousand dollars, or so much thereof as may be necessary, is hereby appropriated out of any moneys in the treasury not otherwise appropriated, to be paid in the manner prescribed by chapter five hundred of the laws of eighteen hundred and ninety-seven. Of such amount the commissioner of agriculture may expend such sum or sums as he may deem necessary or expedient, not exceeding the sum of seven thousand five hundred dollars in promoting, by instruction or otherwise, and encouraging the proper and economic cultivation of sugar beets. This appropriation is made by the legislature in continuation of the policy adopted at the session of eighteen hundred and ninety-seven in the faith and with the declared purpose of making direct appropriations from the state for a successive period of not less than five years from said first appropriation, in aid of the permanent establishment of the beet sugar industry in this state.

§ 2. This act shall take effect immediately.

CHAPTER 543.

AN ACT to amend the domestic commerce law, in relation to the unlawful detention of milk cans.

Became a law April 19, 1900, with the approval of the Governor. Passed, three-fifths being present.

The People of the State of New York, represented in Senate and Assembly, do enact as follows:

Section 1. The first paragraph of section twenty-nine of chapter three hundred and seventy-six of the laws of eighteen hundred and ninety-six, entitled "An act relating to domestic commerce, constituting chapter thirty-four of the general laws," is hereby amended to read as follows:

§ 29. Unlawful detention of milk cans.—No person shall, without the consent of the owner or shipper, or his agent, use, sell, dispose of, buy, or traffic in any can, irrespective of its condition, or the use to which it may have been applied, belonging to any dealer in or shipper of milk or cream in this state, or which may be shipped to any town, village or city in the state, which can has the name or initials of such owner, dealer or shipper stamped, marked or fastened thereupon, or wilfully mar, erase or change by re-marking or otherwise, such name or initials.

§ 2. This act shall take effect immediately.

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